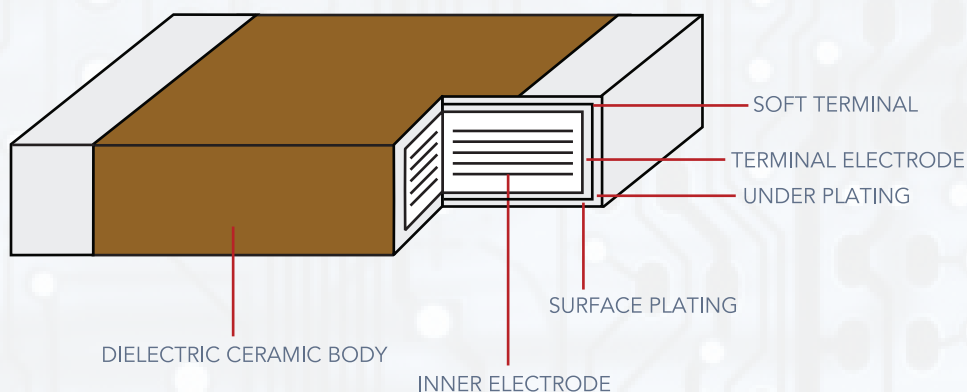


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME	Capacitor (MLCC)
- SERIES	CHV
- DIELECTRIC	NPO
- DIMENSION	0201
- WEIGHT	0.236 mg
- MANUFACTURE NAME	Cal-Chip Electronics Inc.
- ADDRESS	59 Steamwhistle Drive, Ivyland, PA 18974

GENERAL COMPOSITION



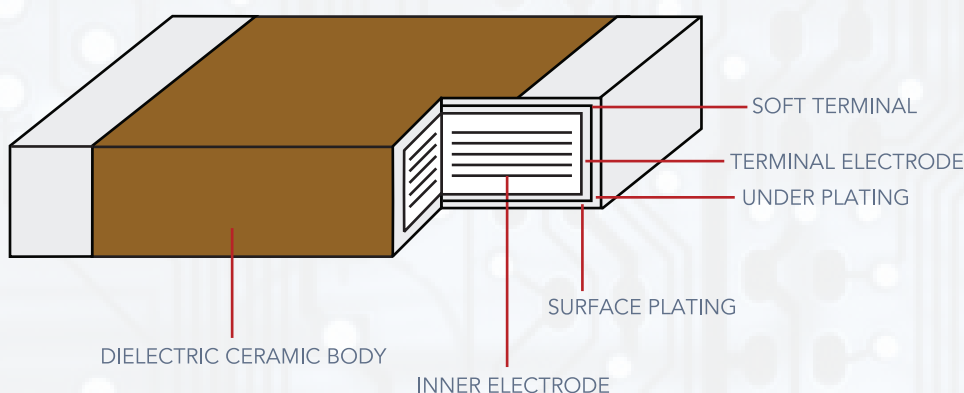
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Strontium Oxide	13	Strontium Oxide	11.7780	1314-11-0	Ceramic	0.0278	0.2137	0.236	NPO BME 0201 SERIES
		Calcium Oxide	15	Calcium Oxide	13.5900	1305-78-8		0.0321			
		Zirconium Dioxide	50	Zirconium Dioxide	45.3000	1314-23-4		0.1067			
		Titanium Dioxide	2	Titanium Dioxide	1.8120	13463-67-7		0.0043			
		Silica	15	Silica	13.5900	14808-60-7		0.0321			
		Manganese Tetroxide	5	Manganese Tetroxide	4.5300	1317-35-7		0.0107			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.0057	0.0071	0.236	NPO BME 0201 SERIES
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.0014			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.0125	0.0142	0.236	NPO BME 0201 SERIES
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.0017			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0005	0.0005	0.236	NPO BME 0201 SERIES
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0005	0.0005	0.236	NPO BME 0201 SERIES

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7R
- DIMENSION 0201
- SIZE 0.31mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	0.2753	0.2809	0.31	X7R 0201 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.0056			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.0074	0.0093		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.0019			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.0164	0.0186		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.0022			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0006	0.0006		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0006	0.0006		

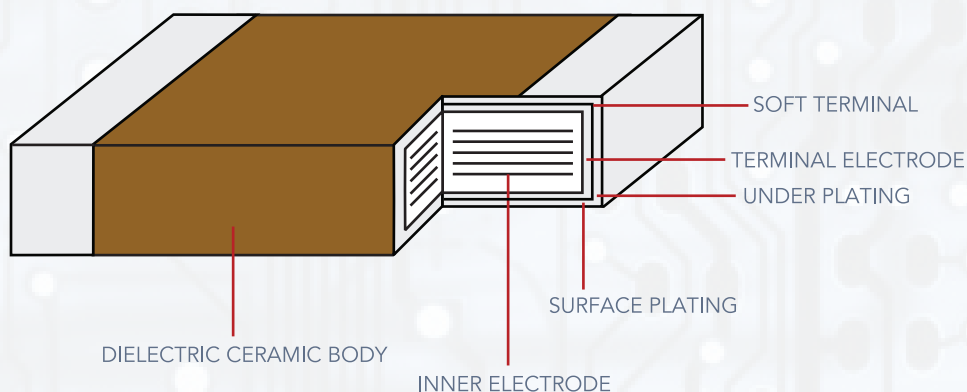


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC 0201
- DIMENSION X6S
- WEIGHT 0.31mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



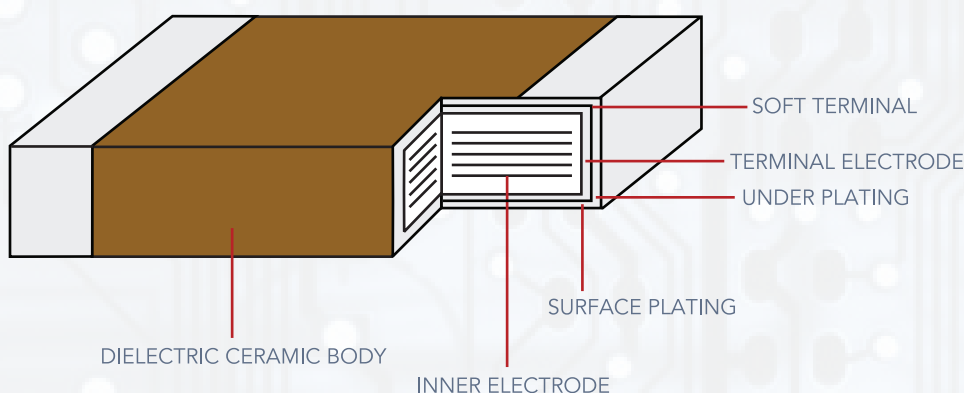
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	0.2753	0.2809	0.31	X6S 0201 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.0056			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.0074	0.0093		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.0019			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.0164	0.0186		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.0022			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0006	0.0006		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0006	0.0006		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC 0201
- DIMENSION X5R
- SIZE 0.31mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	100	Barium Titanate (IV)	90.6000	12047-27-7	Ceramic	0.2809	0.2809	0.31	X5R 0201 SERIES
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.0074	0.0093		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.0019			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.0164	0.0186		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.0022			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0006	0.0006		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0006	0.0006		

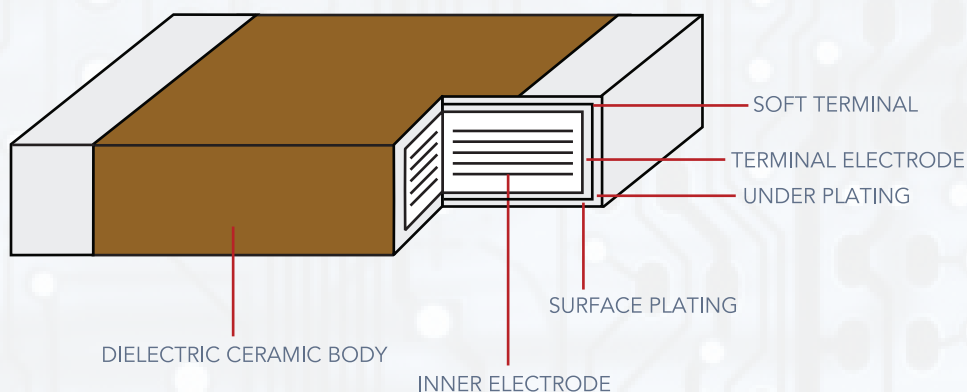


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC Y5V
- DIMENSION 0201
- WEIGHT 0.31 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



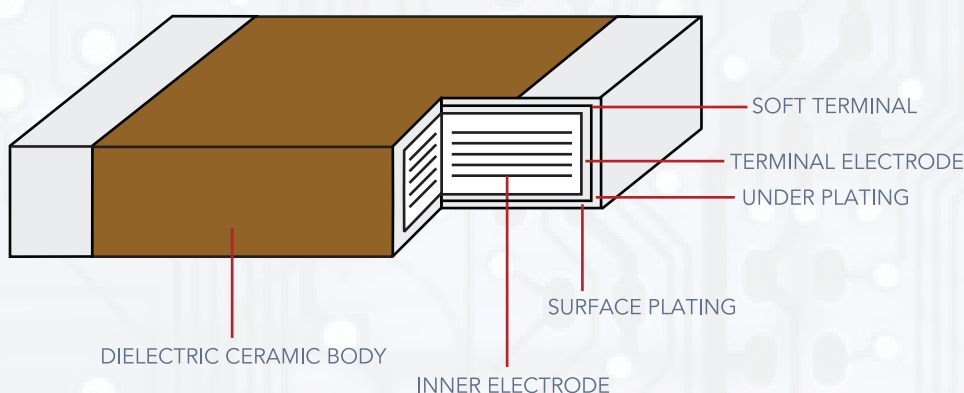
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	87.6	Barium Titanate	95	Barium Titanate (IV)	83.2200	12047-27-7	Ceramic	0.258	0.2716	0.31	Y5V 0201 SERIES
		Barium Ziconate	5	Barium Ziconate	4.3800	12009-21-1		0.0136			
Inner Electrode	5	Nickel	80	Nickel	4.0000	7440-02-0	Ni paste	0.0124	0.0155		
		Barium Titanate	20	Barium Titanate (IV)	1.0000	12047-27-7		0.0031			
Terminal Electrode	7	Copper	88	Copper	6.1600	7440-50-8	Cu paste	0.0191	0.0217		
		Lead Free Glass	12	Lead Free Glass Frit	0.8400	65997-18-4		0.0026			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0006	0.0006		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0006	0.0006		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC NPO
- DIMENSION 0402
- SIZE 1.216 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Strontium Oxide	13	Strontium Oxide	11.7780	1314-11-0	Ceramic	0.1432	1.1017	1.216	NPO 0402 SERIES
		Calcium Oxide	15	Calcium Oxide	13.5900	1305-78-8		0.1653			
		Zirconium Dioxide	50	Zirconium Dioxide	45.3000	1314-23-4		0.5508			
		Titanium Dioxide	2	Titanium Dioxide	1.8120	13463-67-7		0.022			
		Silica	15	Silica	13.5900	14808-60-7		0.1653			
		Manganese Tetroxide	5	Manganese Tetroxide	4.5300	1317-35-7		0.0551			
Inner Electrode	3	Nickel	80	Nickel	2.400	7440-02-0	Ni paste	0.0292	0.0365	1.216	NPO 0402 SERIES
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.0073			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.0642	0.073	1.216	NPO 0402 SERIES
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.0088			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0024	0.0024	1.216	NPO 0402 SERIES
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0024	0.0024	1.216	NPO 0402 SERIES

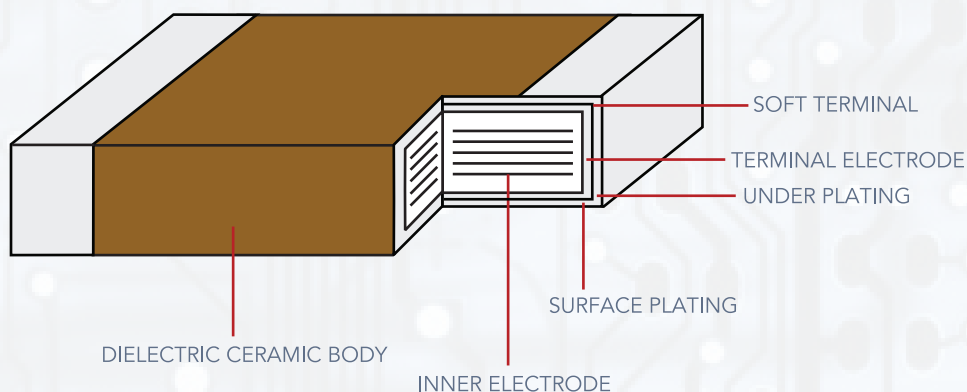


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7R
- DIMENSION 0402
- WEIGHT 1.34 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



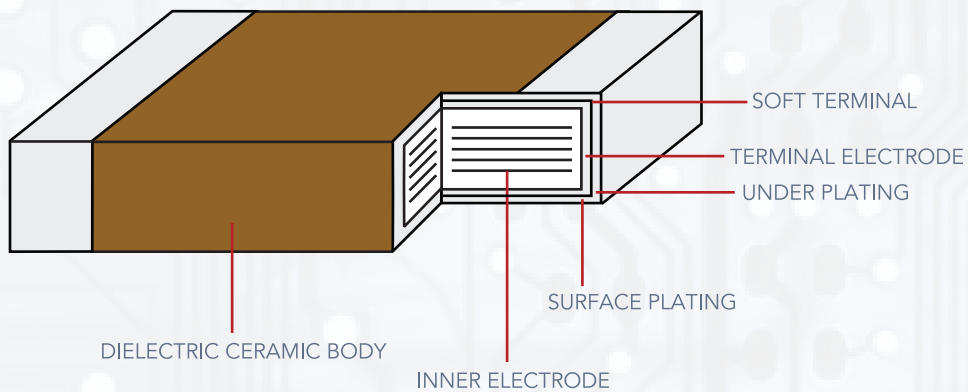
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	1.1897	1.214	1.34	X7R 0402 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.0243			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.0322	0.0402		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.008			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.0708	0.0804		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.0096			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0027	0.0027		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0027	0.0027		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7S
- DIMENSION 0402
- SIZE 1.34 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	1.1897	1.214	1.34	X7S 0402 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.0243			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.0322	0.0402		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.008			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.0708	0.0804		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.0096			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0027	0.0027		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0027	0.0027		

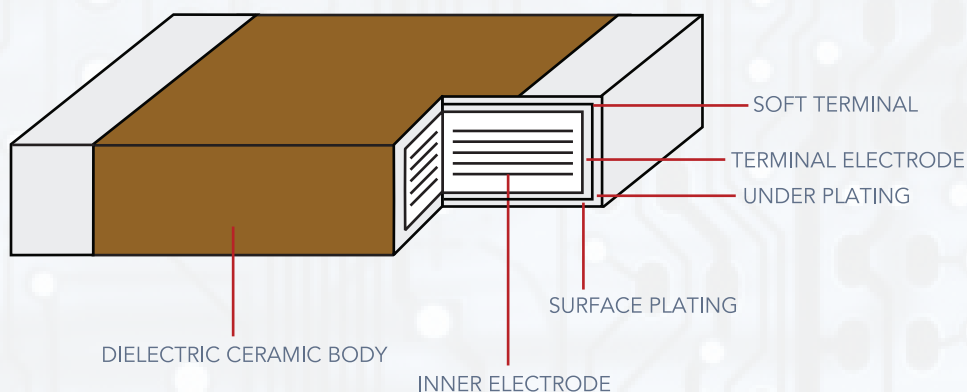


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X6S
- DIMENSION 0402
- WEIGHT 1.34 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



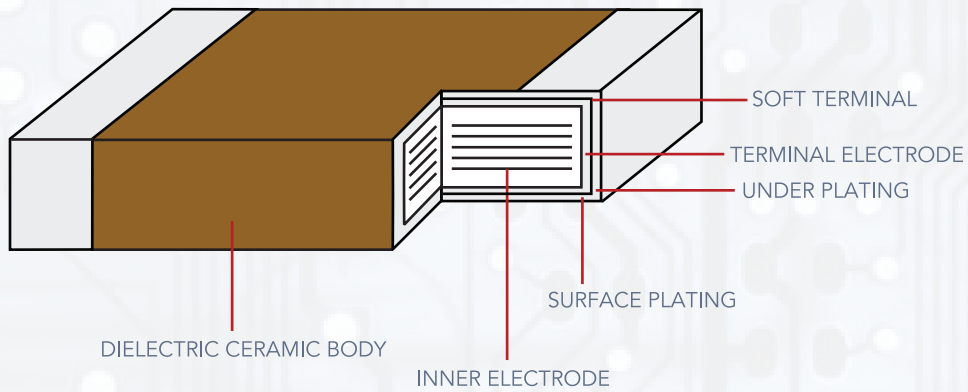
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	1.1897	1.214	1.34	X6S 0402 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.0243			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.0322	0.0402		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.008			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.0708	0.0804		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.0096			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0027	0.0027		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0027	0.0027		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X5R
- DIMENSION 0402
- SIZE 1.34 mg
- WEIGHT
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	100	Barium Titanate (IV)	90.6000	12047-27-7	Ceramic	1.214	1.214	1.34	X5R 0402 SERIES
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.0322	0.0402		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.008			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.0708	0.0804		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.0096			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0027	0.0027		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0027	0.0027		

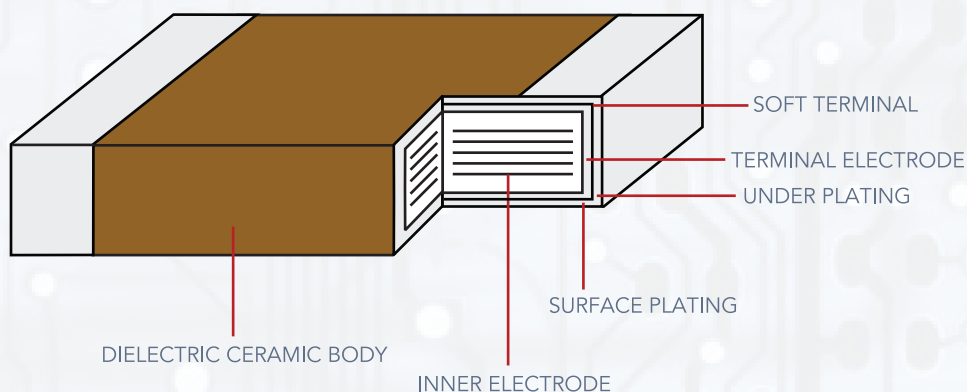


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC Y5V
- DIMENSION 0402
- WEIGHT 1.32 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



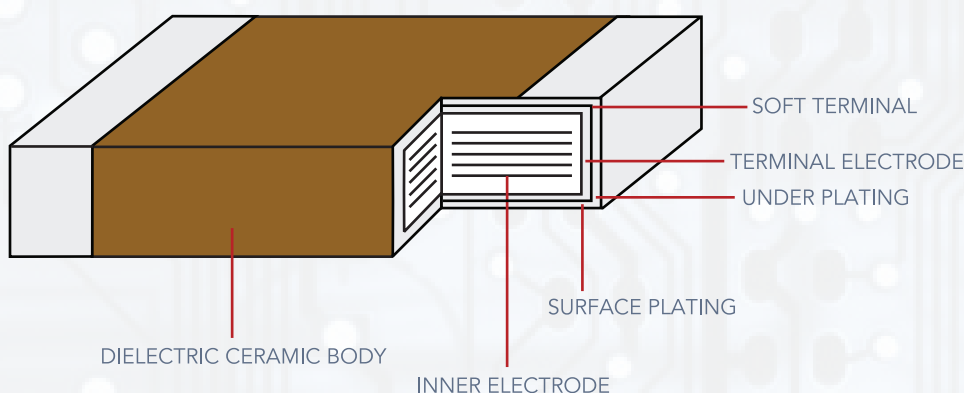
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	87.6	Barium Titanate	95	Barium Titanate (IV)	83.2200	12047-27-7	Ceramic	1.1067	1.165	1.33	Y5V 0402 SERIES
		Barium Zirconate	5	Barium Zirconate	4.3800	12009-21-1		0.0583			
Inner Electrode	5	Nickel	80	Nickel	4.0000	7440-02-0	Ni paste	0.0532	0.0665		
		Barium Titanate	20	Barium Titanate (IV)	1.0000	12047-27-7		0.0133			
Terminal Electrode	7	Copper	88	Copper	6.1600	7440-50-8	Cu paste	0.0819	0.0931		
		Lead Free Glass	12	Lead Free Glass Frit	0.8400	65997-18-4		0.0112			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0027	0.0027		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0027	0.0027		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC NPO
- DIMENSION 0603
- SIZE 4.754 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Strontium Oxide	13	Strontium Oxide	11.7780	1314-11-0	Ceramic	0.5599	4.3072	4.754	NPO 0603 SERIES
		Calcium Oxide	15	Calcium Oxide	13.5900	1305-78-8		0.6461			
		Zirconium Dioxide	50	Zirconium Dioxide	45.3000	1314-23-4		2.1536			
		Titanium Dioxide	2	Titanium Dioxide	1.8120	13463-67-7		0.0861			
		Silica	15	Silica	13.5900	14808-60-7		0.6461			
		Manganese Tetroxide	5	Manganese Tetroxide	4.5300	1317-35-7		0.2154			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.1141	0.1426	4.754	NPO 0603 SERIES
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.0285			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.251	0.2852	4.754	NPO 0603 SERIES
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.0342			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0095	0.0095	4.754	NPO 0603 SERIES
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0095	0.0095	4.754	NPO 0603 SERIES

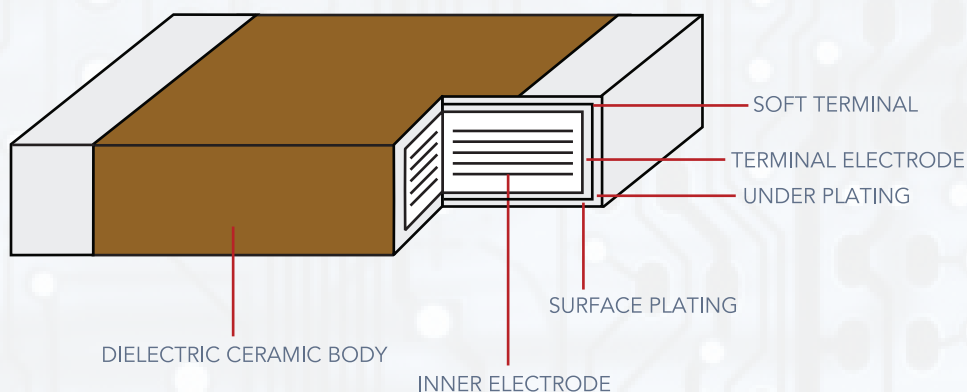


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7R
- DIMENSION 0603
- WEIGHT 5.5 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



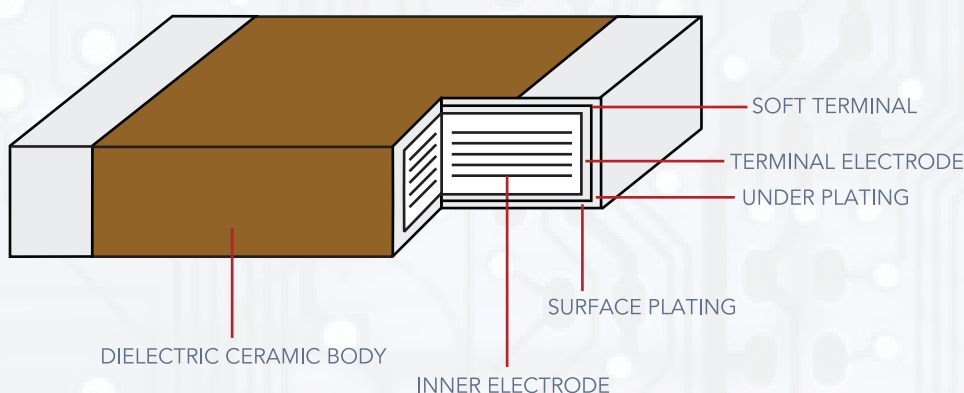
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	4.883	4.983	5.5	X7R 0603 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.1			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.132	0.165		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.033			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.29	0.33		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.04			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.011	0.011		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.011	0.011		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7S
- DIMENSION 0603
- SIZE 5.5 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	4.883	4.983	5.5	XSR 0402 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.1			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.132	0.165		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.033			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.29	0.33		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.04			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.011	0.011		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.011	0.011		

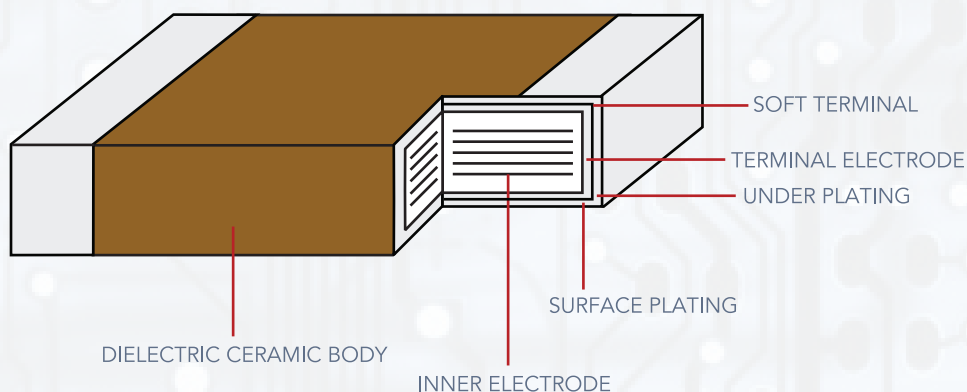


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X6S
- DIMENSION 0603
- WEIGHT 5.5 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



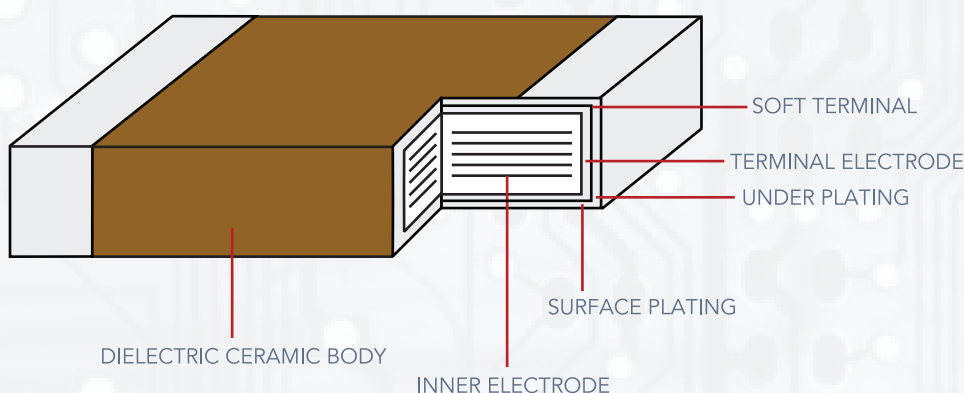
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	4.883	4.983	5.5	X6S 0603 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.1			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.132	0.165		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.033			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.29	0.33		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.04			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.011	0.011		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.011	0.011		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X5R
- DIMENSION 0603
- SIZE 5.5 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	100	Barium Titanate (IV)	90.600	12047-27-7	Ceramic	4.983	4.983	5.5	X5R 0603 SERIES
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.132	0.165		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.033			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.29	0.33		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.04			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.011	0.011		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.011	0.011		

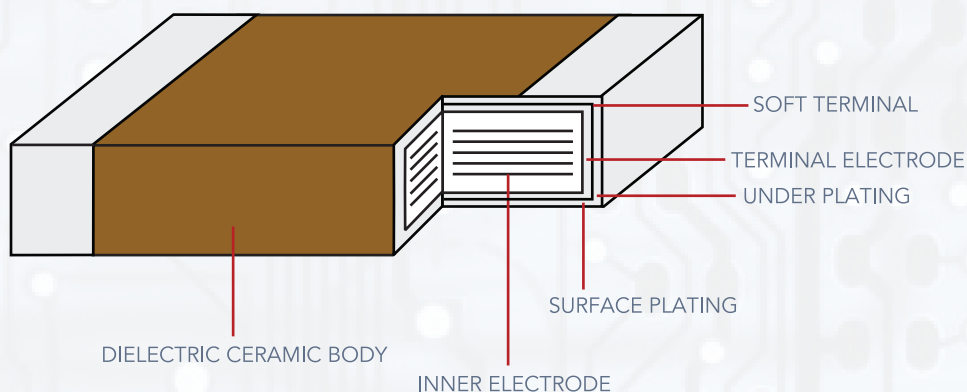


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC Y5V
- DIMENSION 0603
- WEIGHT 5.69 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



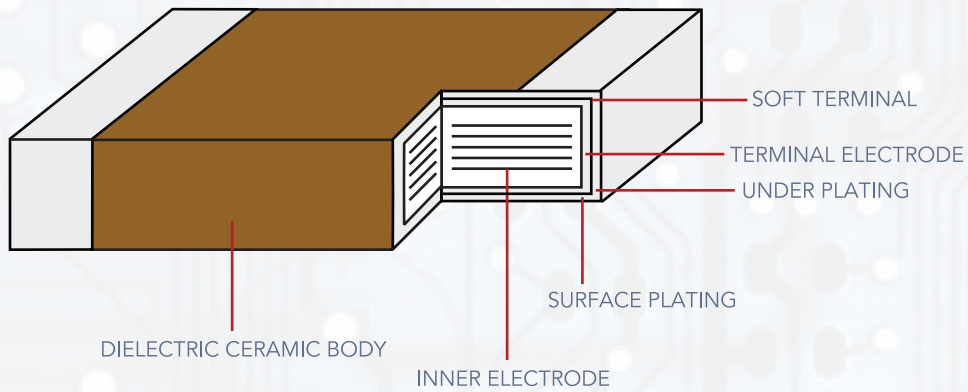
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	87.6	Barium Titanate	95	Barium Titanate (IV)	83.2200	12047-27-7	Ceramic	4.735	4.984	5.69	Y5V 0603 SERIES
		Barium Zirconate	5	Barium Zirconate	4.3800	12009-21-1		0.249			
Inner Electrode	5	Nickel	80	Nickel	4.0000	7440-02-0	Ni paste	0.228	0.285		
		Barium Titanate	20	Barium Titanate (IV)	1.0000	12047-27-7		0.057			
Terminal Electrode	7	Copper	88	Copper	6.1600	7440-50-8	Cu paste	0.351	0.399		
		Lead Free Glass	12	Lead Free Glass Frit	0.8400	65997-18-4		0.048			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.011	0.011		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.011	0.011		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC NPO
- DIMENSION 0805
- SIZE 7.608 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Strontium Oxide	13	Strontium Oxide	11.7780	1314-11-0	Ceramic	0.8961	6.8929	7.608	NPO 0805 SERIES
		Calcium Oxide	15	Calcium Oxide	13.5900	1305-78-8		1.0339			
		Zirconium Dioxide	50	Zirconium Dioxide	45.3000	1314-23-4		3.4465			
		Titanium Dioxide	2	Titanium Dioxide	1.8120	13463-67-7		0.1379			
		Silica	15	Silica	13.5900	14808-60-7		1.0339			
		Manganese Tetroxide	5	Manganese Tetroxide	4.5300	1317-35-7		0.3446			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.1826	0.2282	7.608	NPO 0805 SERIES
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.0456			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.4017	0.4565	7.608	NPO 0805 SERIES
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.0548			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0152	0.0152	7.608	NPO 0805 SERIES
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0152	0.0152	7.608	NPO 0805 SERIES

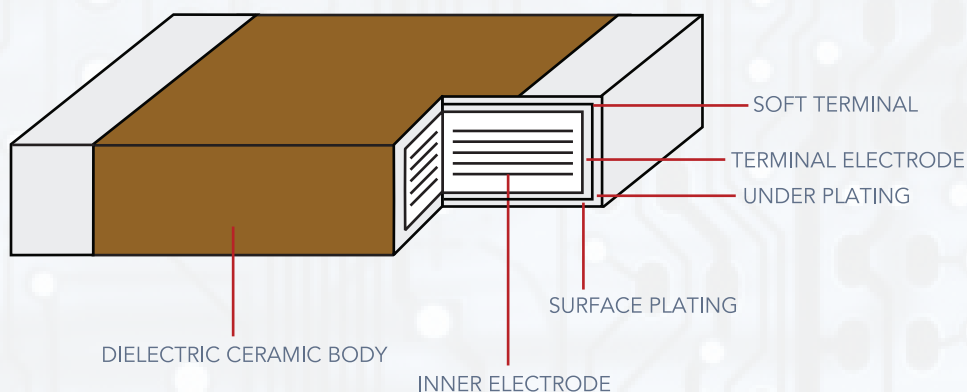


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7R
- DIMENSION 0805
- WEIGHT 11.27 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



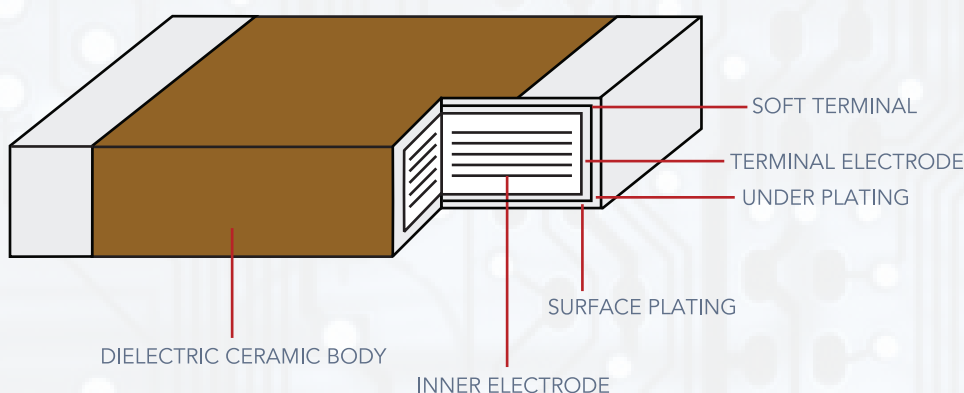
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	10.006	10.21	11.27	X7R 0805 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.204			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.27	0.338		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.068			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.595	0.676		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.081			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.023	0.023		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.023	0.023		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7S
- DIMENSION 0805
- SIZE 11.27 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	BaTiO ₃	88.7880	12047-27-7	Ceramic	10.006	10.21	11.27	X7R 0805 SERIES
		Yttrium Oxide	2	Y ₂ O ₃	1.8120	1314-36-9		0.204			
Inner Electrode	3	Nickel	80	Ni	2.4000	7440-02-0	Ni paste	0.27	0.338		
		Barium Titanate	20	BaTiO ₃	0.6000	12047-27-7		0.068			
Terminal Electrode	6	Copper	88	Cu	5.2800	7440-50-8	Cu paste	0.595	0.676		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.081			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.023	0.023		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.023	0.023		

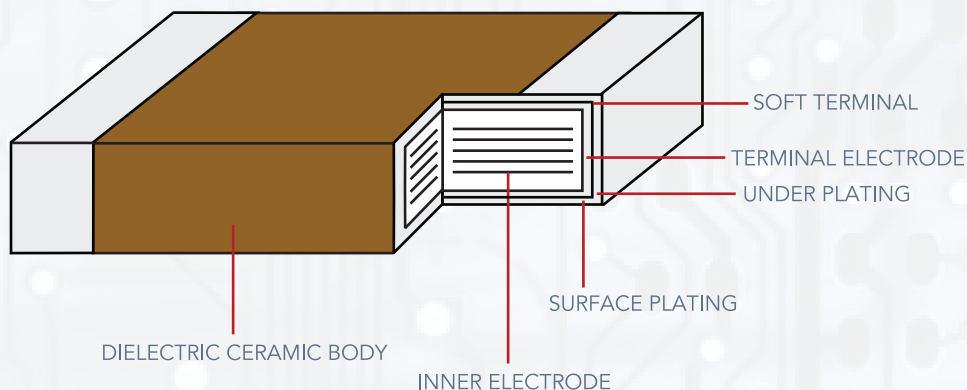


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X6S
- DIMENSION 0805
- WEIGHT 11.27 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



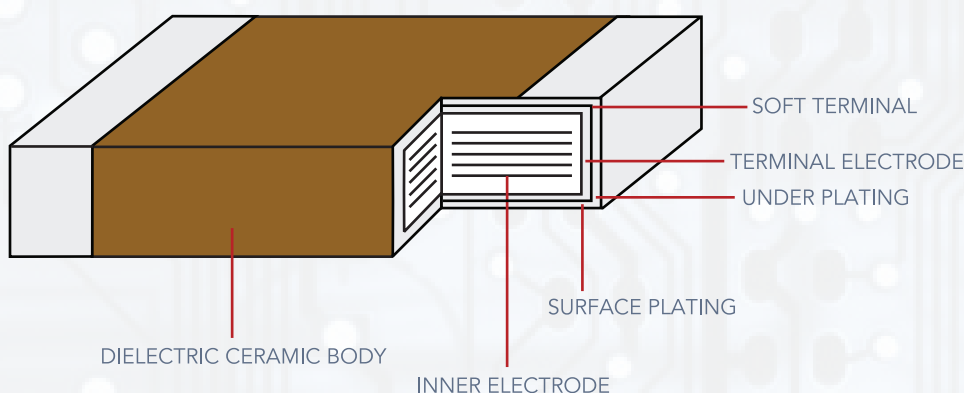
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	10.006	10.21	11.27	X6S 0805 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.204			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.27	0.338		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.068			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.595	0.676		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.081			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.023	0.023		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.023	0.023		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X5R
- DIMENSION 0805
- SIZE 11.27 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	100	Barium Titanate (IV)	90.6000	12047-27-7	Ceramic	10.2107	10.2107	11.27	X5R 0805 SERIES
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.2705	0.3381		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.0676			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.5951	0.6762		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.811			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0225	0.0225		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0225	0.0225		

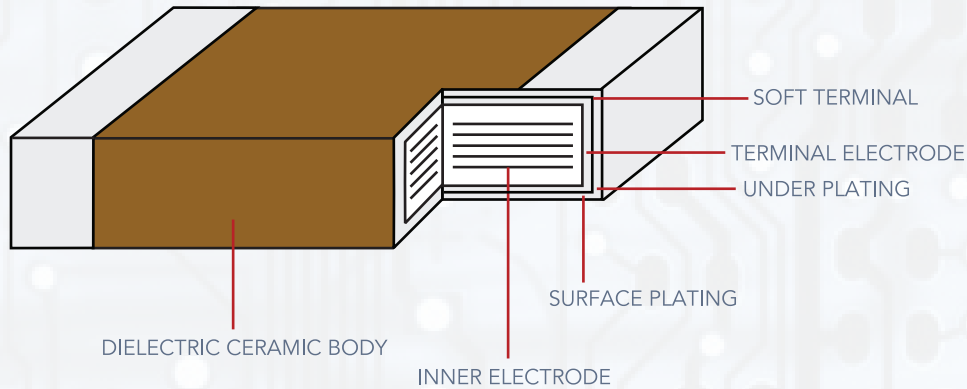


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC Y5V
- DIMENSION 0805
- WEIGHT 8.54 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



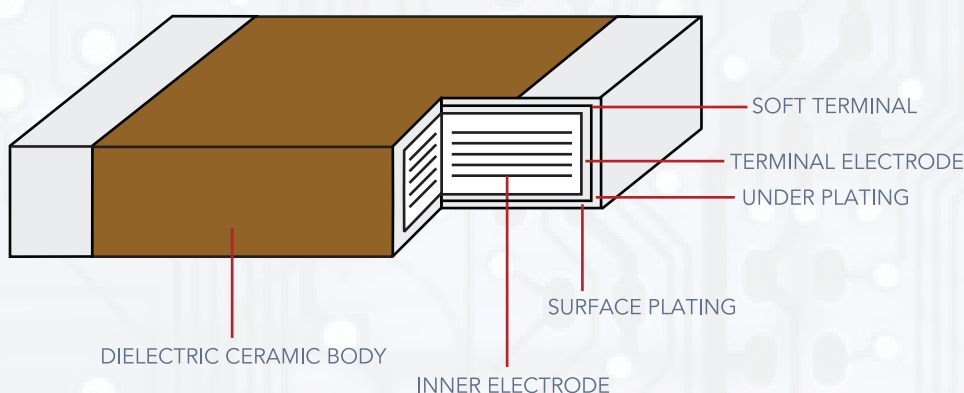
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	87.6	Barium Titanate	95	Barium Titanate (IV)	83.2200	12047-27-7	Ceramic	7.107	7.481	8.54	Y5V 0805 SERIES
		Barium Zirconate	5	Barium Zirconate	4.3800	12009-21-1		0.374			
Inner Electrode	5	Nickel	80	Nickel	4.0000	7440-02-0	Ni paste	0.342	0.427		
		Barium Titanate	20	Barium Titanate (IV)	1.0000	12047-27-7		0.085			
Terminal Electrode	7	Copper	88	Copper	6.1600	7440-50-8	Cu paste	0.526	0.598		
		Lead Free Glass	12	Lead Free Glass Frit	0.8400	65997-18-4		0.072			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.017	0.017		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.017	0.017		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC NPO
- DIMENSION 01005
- SIZE 0.11 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Strontium Oxide	13	Strontium Oxide	11.7780	1314-11-0	Ceramic	0.013	0.0997	0.11	NPO 01005 SERIES
		Calcium Oxide	15	Calcium Oxide	13.5900	1305-78-8		0.0149			
		Zirconium Dioxide	50	Zirconium Dioxide	45.3000	1314-23-4		0.0499			
		Titanium Dioxide	2	Titanium Dioxide	1.8120	13463-67-7		0.002			
		Silica	15	Silica	13.5900	14808-60-7		0.0149			
		Manganese Tetroxide	5	Manganese Tetroxide	4.5300	1317-35-7		0.005			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.0026	0.0033	0.11	NPO 01005 SERIES
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.0007			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.0058	0.0066	0.11	NPO 01005 SERIES
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.0008			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0002	0.0002	0.11	NPO 01005 SERIES
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0002	0.0002	0.11	NPO 01005 SERIES

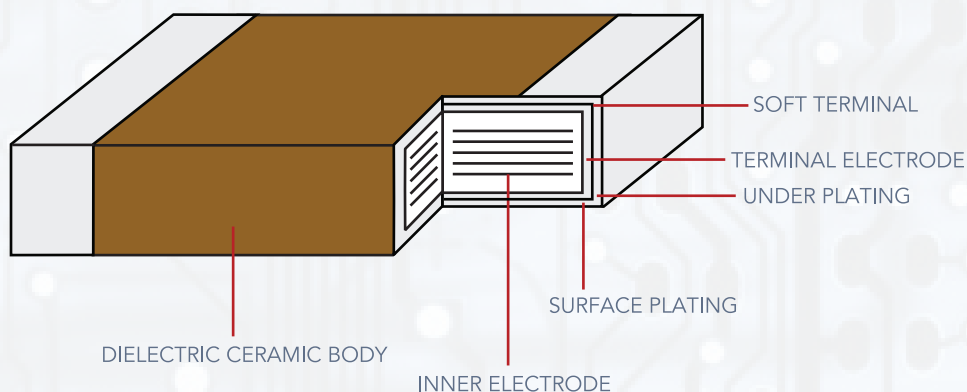


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7R
- DIMENSION 01005
- WEIGHT 0.11 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



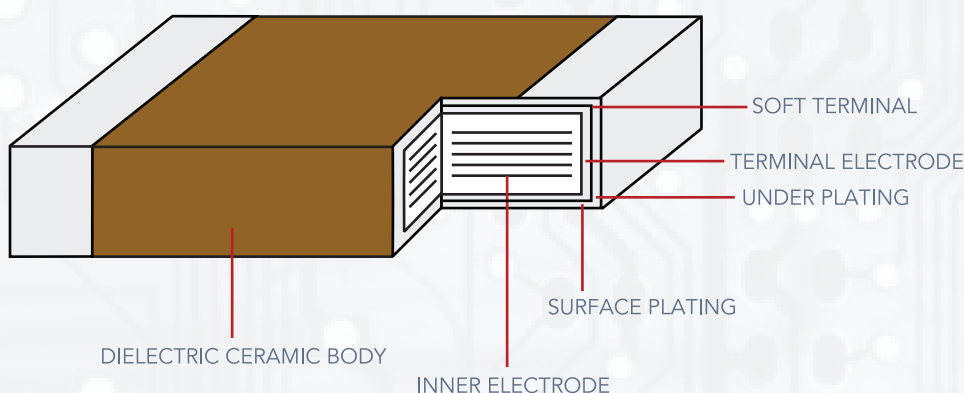
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	0.0977	0.0997	0.11	X7R 01005 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.002			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.0026	0.0033		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.0007			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.0058	0.0066		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.0008			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0002	0.0002		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0002	0.0002		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X5R
- DIMENSION 01005
- SIZE 0.13 mg
- WEIGHT
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	100	Barium Titanate (IV)	90.6000	12047-27-7	Ceramic	0.1177	0.1177	0.13	X5R 01005 SERIES
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.0031	0.0039		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.0008			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	0.0069	0.0078		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.0009			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0003	0.0003		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0003	0.0003		

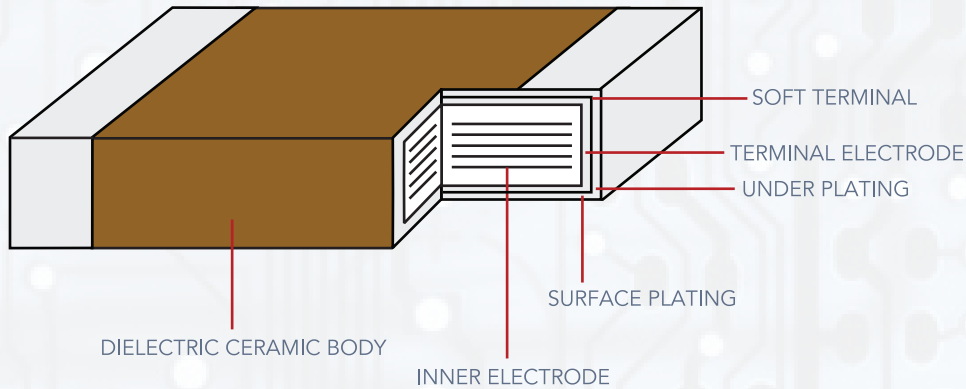


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC NPO
- DIMENSION 1206
- WEIGHT 30 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



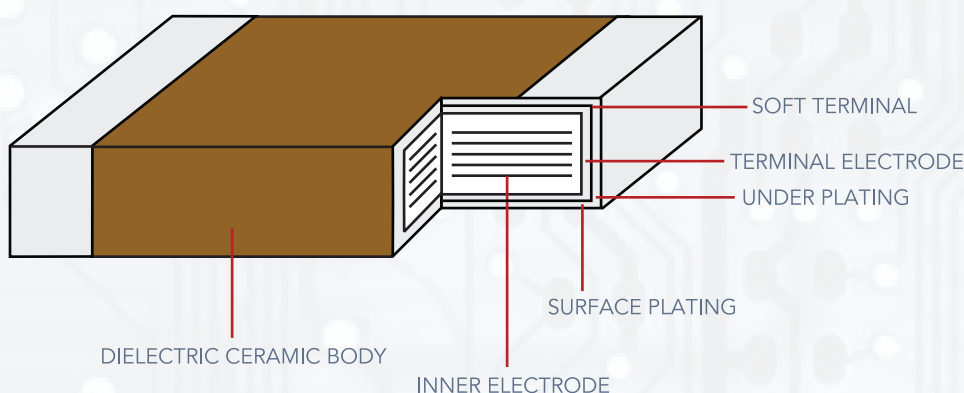
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Strontium Oxide	13	Strontium Oxide	11.7780	1314-11-0	Ceramic	3.533	27.18	30	NPO 1206 SERIES
		Calcium Oxide	15	Calcium Oxide	13.5900	1305-78-8		4.077			
		Zirconium Dioxide	50	Zirconium Dioxide	45.3000	1314-23-4		13.59			
		Titanium Dioxide	2	Titanium Dioxide	1.8120	13463-67-7		0.544			
		Silica	15	Silica	13.5900	14808-60-7		4.077			
		Manganese Tetroxide	5	Manganese Tetroxide	4.5300	1317-35-7		1.359			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.72	0.9	30	NPO 1206 SERIES
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.18			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	1.584	1.8	30	NPO 1206 SERIES
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.216			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.06	0.06	30	NPO 1206 SERIES
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.06	0.06	30	NPO 1206 SERIES

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7R
- DIMENSION 1206
- SIZE 21.71 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	19.2759	19.6693	21.71	X7R 1206 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.3934			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.521	0.6513		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.1303			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	1.1463	1.3026		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.1563			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0434	0.0434		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0434	0.0434		

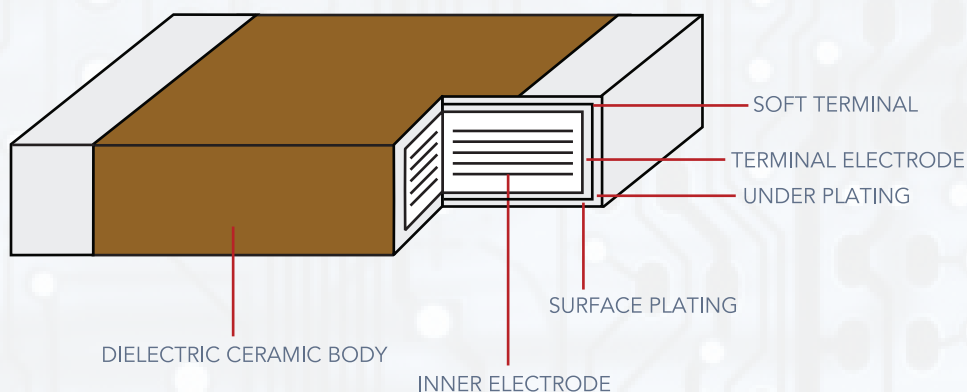


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7S
- DIMENSION 1206
- WEIGHT 21.71 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



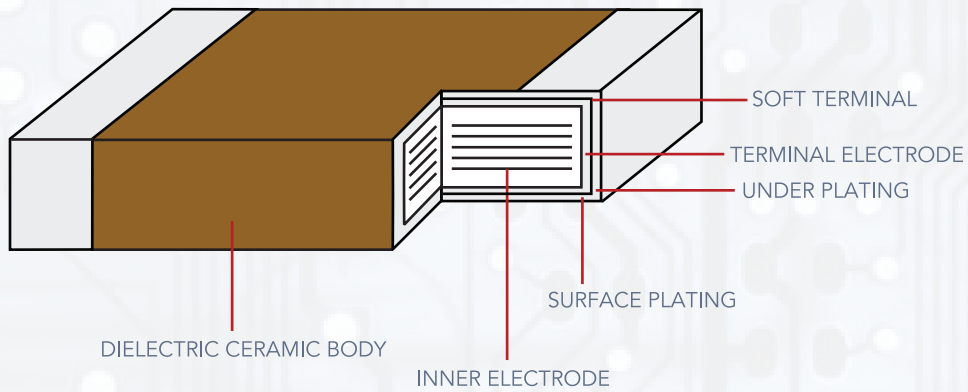
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	19.2759	19.6693	21.71	X7R 1206 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.3934			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.521	0.6513		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.1303			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	1.1463	1.3026		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.1563			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0434	0.0434		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0434	0.0434		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X6S
- DIMENSION 1206
- SIZE 21.71 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	19.2759	19.6693	21.71	X6S 1206 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.3934			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.521	0.6513		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.1303			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	1.1463	1.3026		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.1563			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0434	0.0434		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0434	0.0434		

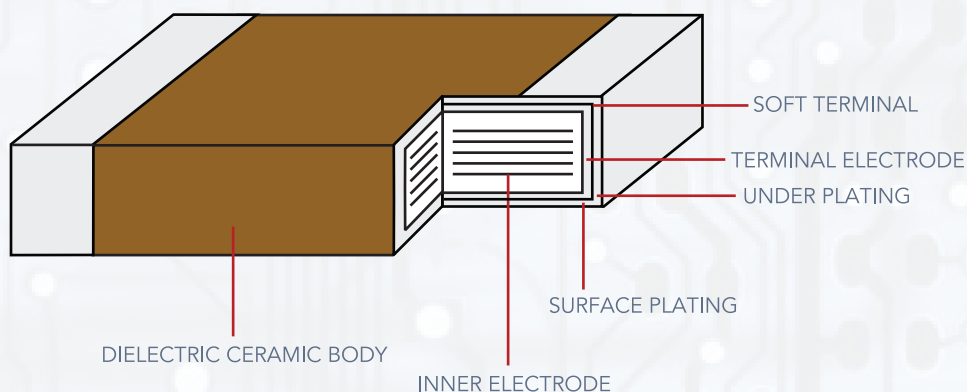


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X5R
- DIMENSION 1206
- WEIGHT 21.71 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



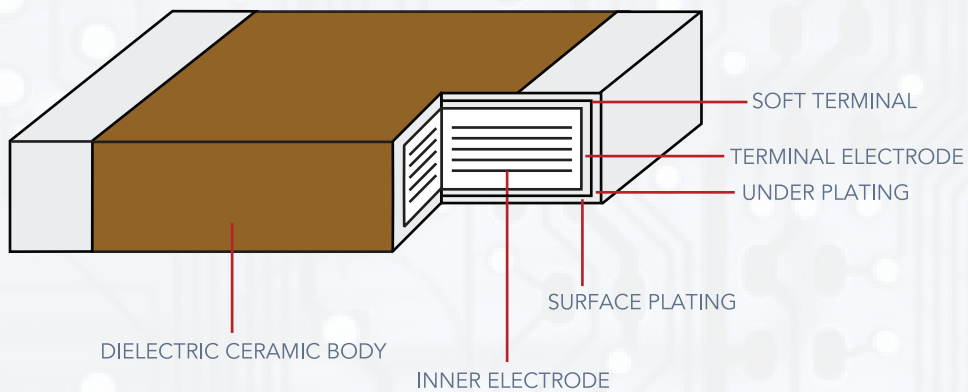
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	100	Barium Titanate (IV)	90.6000	12047-27-7	Ceramic	19.6693	19.6693	21.71	X5R 1206 SERIES
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	0.521	0.6513		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.1303			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	1.1463	1.3026		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.1563			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0434	0.0434		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0434	0.0434		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC Y5V
- DIMENSION 1206
- SIZE 21.06 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	87.6	Barium Titanate	95	Barium Titanate (IV)	83.2200	12047-27-7	Ceramic	17.5262	18.4486	21.06	Y5V 1206 SERIES
		Barium Zirconate	5	Barium Zirconate	4.3800	12009-21-1		0.9224			
Inner Electrode	5	Nickel	80	Nickel	4.0000	7440-02-0	Ni paste	0.8424	1.053		
		Barium Titanate	20	Barium Titanate (IV)	1.0000	12047-27-7		0.2106			
Terminal Electrode	7	Copper	88	Copper	6.1600	7440-50-8	Cu paste	1.2973	1.4742		
		Lead Free Glass	12	Lead Free Glass Frit	0.8400	65997-18-4		0.1769			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0421	0.0421		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0421	0.0421		

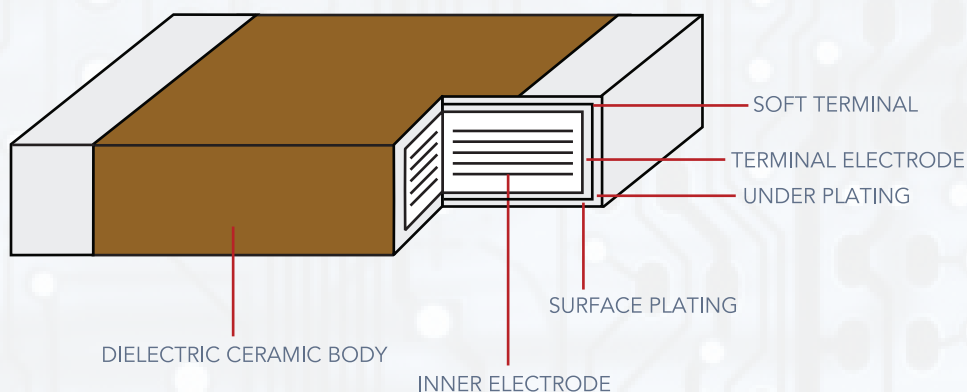


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC NPO
- DIMENSION 1210
- WEIGHT 48.62 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



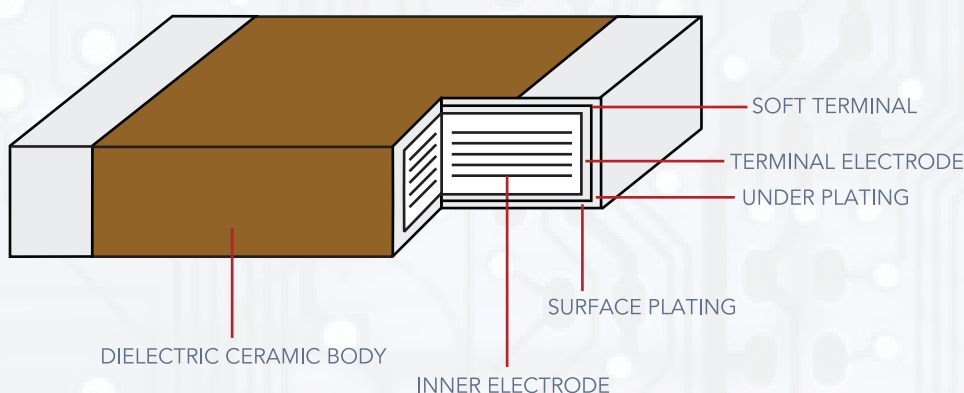
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Strontium Oxide	13	Strontium Oxide	11.7780	1314-11-0	Ceramic	5.7265	44.0498	48.62	NPO 1210 SERIES
		Calcium Oxide	15	Calcium Oxide	13.5900	1305-78-8		6.6075			
		Zirconium Dioxide	50	Zirconium Dioxide	45.3000	1314-23-4		22.0248			
		Titanium Dioxide	2	Titanium Dioxide	1.8120	13463-67-7		0.881			
		Silica	15	Silica	13.5900	14808-60-7		6.6075			
		Manganese Tetroxide	5	Manganese Tetroxide	4.5300	1317-35-7		2.2025			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	1.1669	1.4586	48.62	NPO 1210 SERIES
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.2917			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	2.5671	2.9172	48.62	NPO 1210 SERIES
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.3501			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.0972	0.0972	48.62	NPO 1210 SERIES
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.0972	0.0972	48.62	NPO 1210 SERIES

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7R
- DIMENSION 1210
- SIZE 43 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	38.179	38.958	43	X7R 1210 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.779			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	1.032	1.29		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.258			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	2.27	2.58		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.31			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.086	0.086		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.086	0.086		

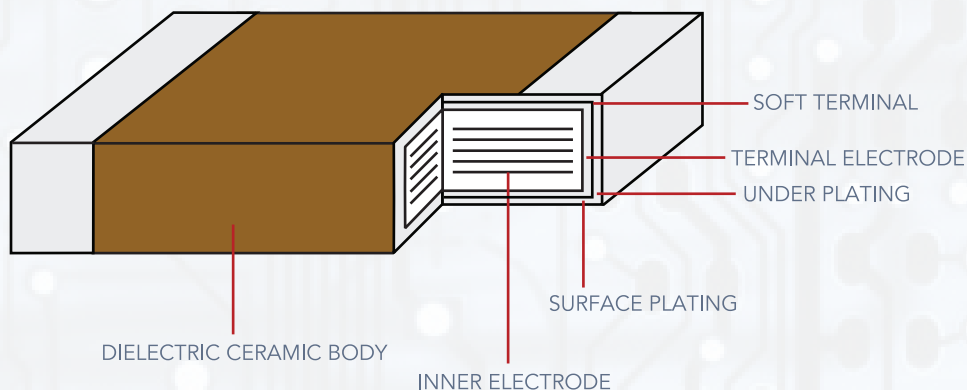


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X6S
- DIMENSION 1210
- WEIGHT 43 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



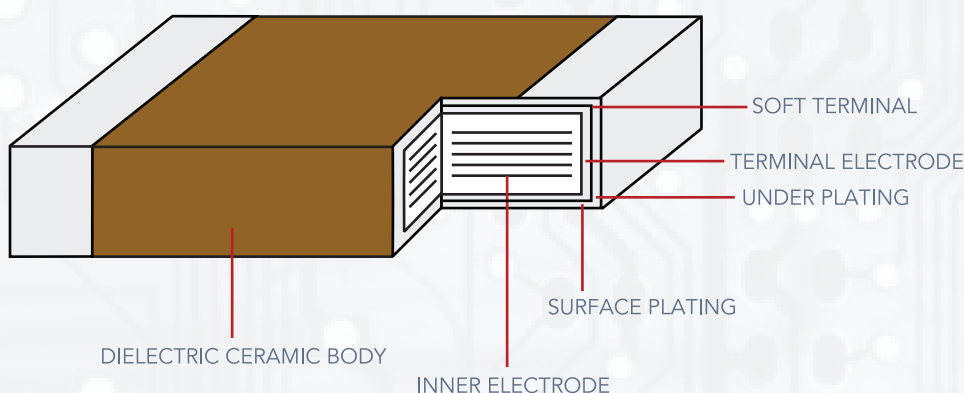
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	38.179	38.958	43	X6S 1210 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		0.779			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	1.032	1.29		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.258			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	2.27	2.58		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.31			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.086	0.086		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.086	0.086		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X5R
- DIMENSION 1210
- SIZE 43 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	100	Barium Titanate (IV)	90.6000	12047-27-7	Ceramic	38.958	38.958	43	X5R 1210 SERIES
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	1.032	1.29		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.258			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	2.27	2.58		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.31			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.086	0.086		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.086	0.086		

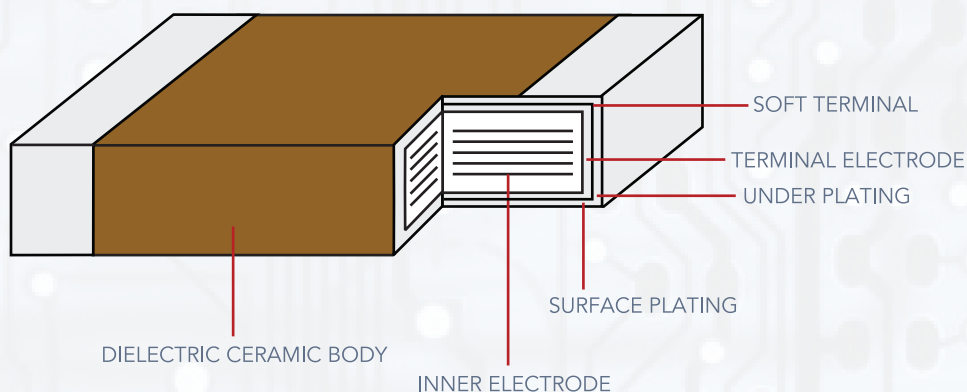


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC Y5V
- DIMENSION 1210
- WEIGHT 43 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



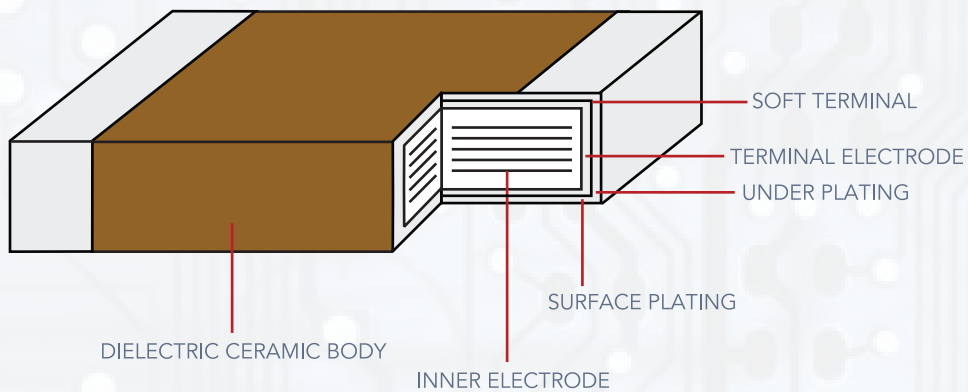
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	87.6	Barium Titanate	95	Barium Titanate (IV)	83.2200	12047-27-7	Ceramic	35.785	37.668	43	Y5V 1210 SERIES
		Barium Zirconate	5	Barium Zirconate	4.3800	12009-21-1		1.883			
Inner Electrode	5	Nickel	80	Nickel	4.0000	7440-02-0	Ni paste	1.72	2.15		
		Barium Titanate	20	Barium Titanate (IV)	1.0000	12047-27-7		0.43			
Terminal Electrode	7	Copper	88	Copper	6.1600	7440-50-8	Cu paste	2.649	3.01		
		Lead Free Glass	12	Lead Free Glass Frit	0.8400	65997-18-4		0.361			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.086	0.086		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.086	0.086		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC NPO
- DIMENSION 1808
- SIZE 55.6 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Strontium Oxide	13	Strontium Oxide	11.7780	1314-11-0	Ceramic	6.5486	50.3736	55.6	NPO 1808 SERIES
		Calcium Oxide	15	Calcium Oxide	13.5900	1305-78-8		7.556			
		Zirconium Oxide	50	Zirconium Oxide	45.3000	1314-23-4		25.1868			
		Titanium Dioxide	2	Titanium Dioxide	1.8120	13463-67-7		1.0075			
		Silica	15	Silica	13.5900	14808-60-7		7.556			
		Manganese Tetroxide	5	Manganese Tetroxide	4.5300	1317-35-7		2.5187			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	1.3344	1.668	55.6	NPO 1808 SERIES
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.3336			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	2.9357	3.336	55.6	NPO 1808 SERIES
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.4003			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.1112	0.1112	55.6	NPO 1808 SERIES
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.1112	0.1112	55.6	NPO 1808 SERIES

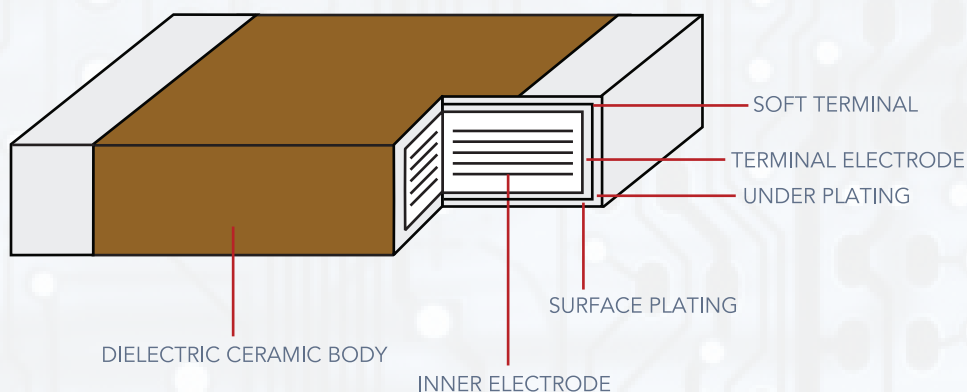


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7R
- DIMENSION 1808
- WEIGHT 71.5 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



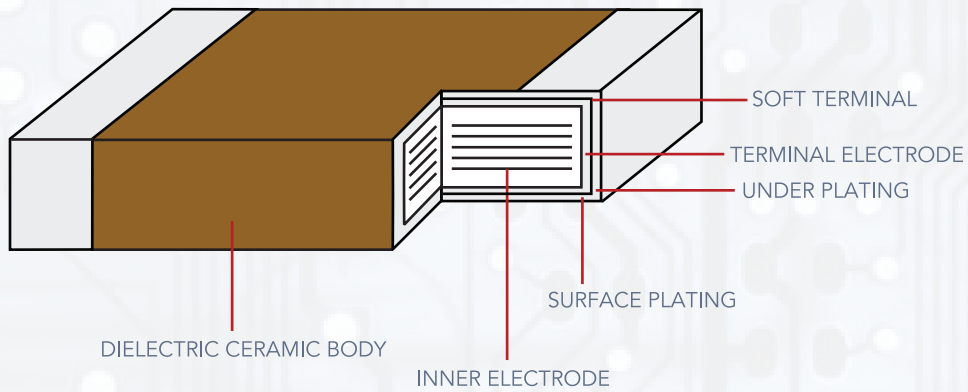
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	63.483	64.779	71.5	X7R 1808 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		1.296			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	1.716	2.145		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.429			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	3.775	4.29		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.515			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.143	0.143		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.143	0.143		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X6S
- DIMENSION 1808
- SIZE 71.5 mg
- WEIGHT
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	63.483	64.779	71.5	X6S 1808 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		1.296			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	1.716	2.145		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.429			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	3.775	4.29		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.515			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.143	0.143		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.143	0.143		

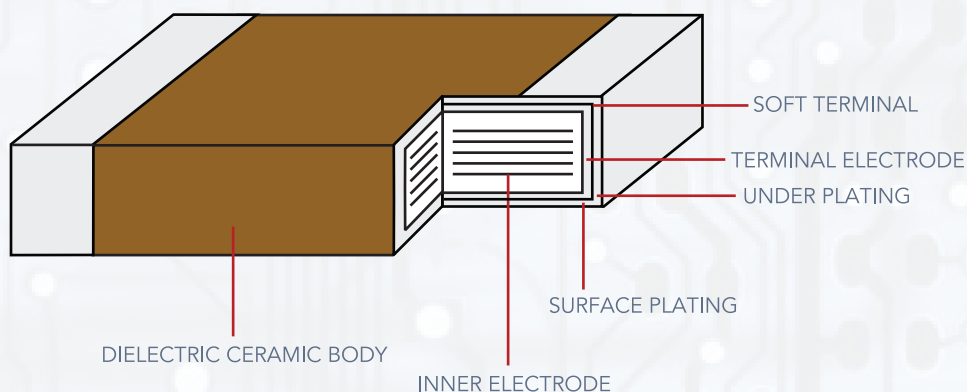


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X5R
- DIMENSION 1808
- WEIGHT 71.5 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



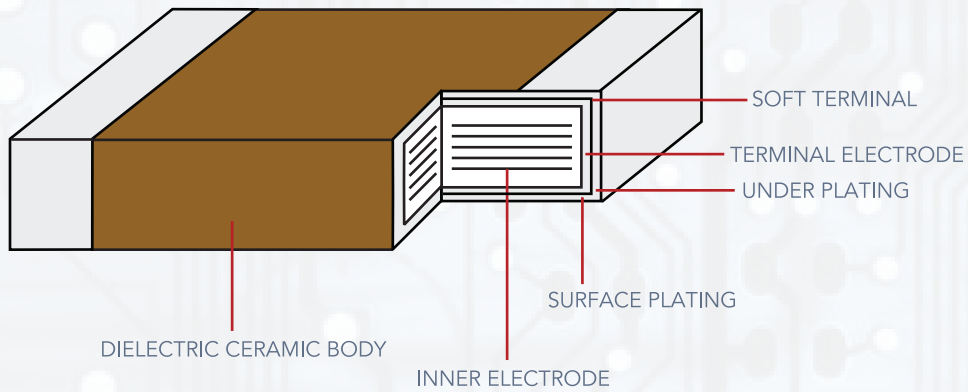
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	100	Barium Titanate (IV)	90.6000	12047-27-7	Ceramic	64.779	64.779	71.5	X5R 1808 SERIES
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	1.716	2.145		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.429			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	3.775	4.29		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.515			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.143	0.143		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.143	0.143		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC Y5V
- DIMENSION 1808
- SIZE 71.5 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	87.6	Barium Titanate	95	Barium Titanate (IV)	83.2200	12047-27-7	Ceramic	59.502	62.634	71.5	Y5V 1808 SERIES
		Barium Ziconate	5	Barium Ziconate	4.3800	12009-21-1		3.132			
Inner Electrode	5	Nickel	80	Nickel	4.0000	7440-02-0	Ni paste	2.86	3.575		
		Barium Titanate	20	Barium Titanate (IV)	1.0000	12047-27-7		0.715			
Terminal Electrode	7	Copper	88	Copper	6.1600	7440-50-8	Cu paste	4.404	5.005		
		Lead Free Glass	12	Lead Free Glass Frit	0.8400	65997-18-4		0.601			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.143	0.143		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.143	0.143		

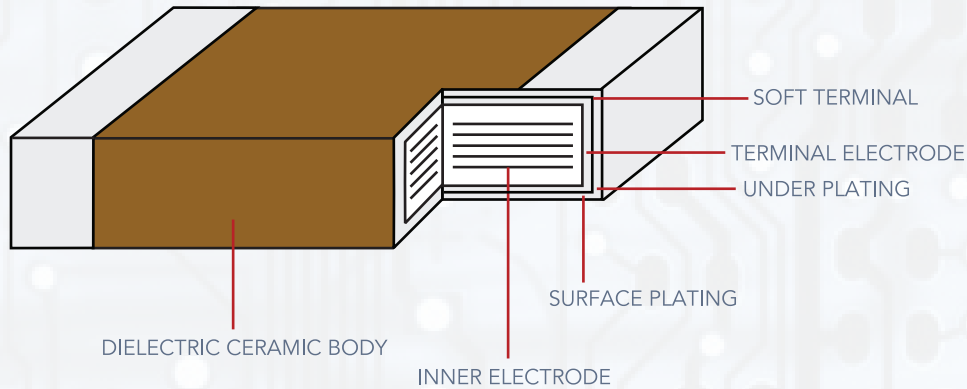


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME	Capacitor (MLCC)
- SERIES	CHV
- DIELECTRIC	NPO
- DIMENSION	1812
- WEIGHT	83.4 mg
- MANUFACTURE NAME	Cal-Chip Electronics Inc.
- ADDRESS	59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



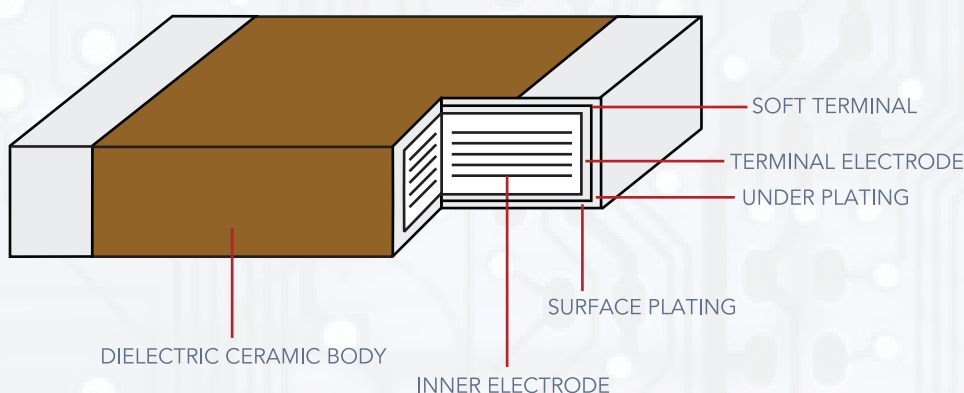
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Strontium Oxide	13	Strontium Oxide	11.7780	1314-11-0	Ceramic	9.8229	75.5604	83.4	NPO 1812 SERIES
		Calcium Oxide	15	Calcium Oxide	13.5900	1305-78-8		11.3341			
		Zirconium Dioxide	50	Zirconium Dioxide	45.3000	1314-23-4		37.7801			
		Titanium Dioxide	2	Titanium Dioxide	1.8120	13463-67-7		1.5112			
		Silica	15	Silica	13.5900	14808-60-7		11.3341			
		Manganese Tetroxide	5	Manganese Tetroxide	4.5300	1317-35-7		3.778			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	2.0016	2.502	83.4	NPO 1812 SERIES
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.5004			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	4.4035	5.004	83.4	NPO 1812 SERIES
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.6005			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.1668	0.1668	83.4	NPO 1812 SERIES
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.1668	0.1668	83.4	NPO 1812 SERIES

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7R
- DIMENSION 1812
- SIZE 91 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	80.797	82.446	91	X7R 1812 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		1.649			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	2.184	2.73		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.546			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	4.805	5.46		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.655			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.182	0.182		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.182	0.182		

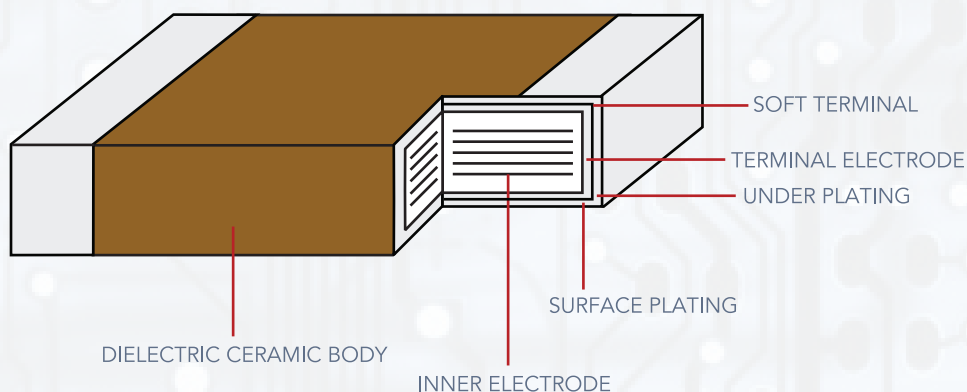


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X6S
- DIMENSION 1812
- WEIGHT 91 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



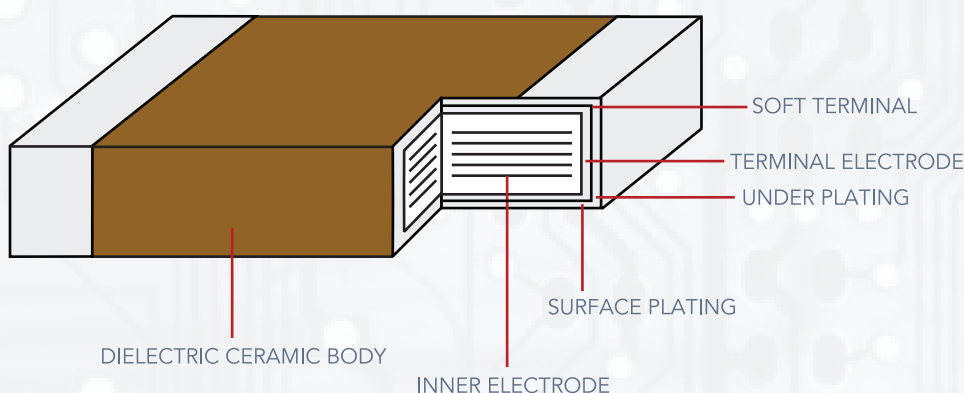
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	80.797	82.446	91	X6S 1812 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		1.649			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	2.184	2.73		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.546			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	4.805	5.46		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.655			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.182	0.182		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.182	0.182		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X5R
- DIMENSION 1812
- SIZE 91 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	100	Barium Titanate (IV)	90.6000	12047-27-7	Ceramic	82.446	82.446	91	X5R 1812 SERIES
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	2.184	2.73		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		0.546			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	4.805	5.46		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		0.655			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.182	0.182		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.182	0.182		

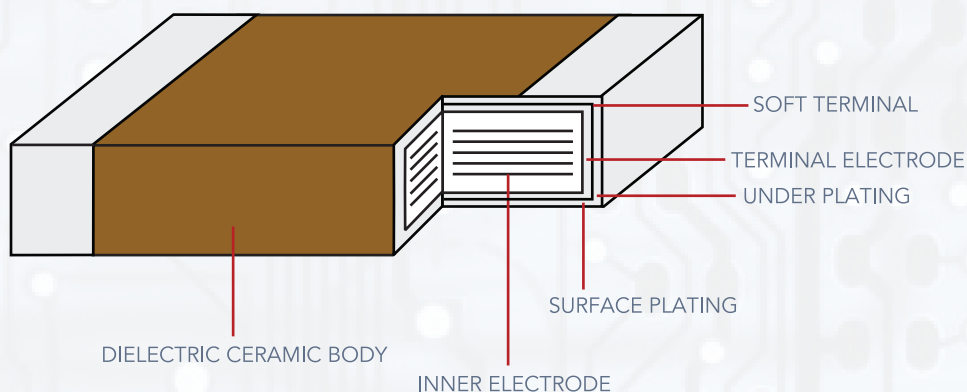


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC Y5V
- DIMENSION 1812
- WEIGHT 91 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



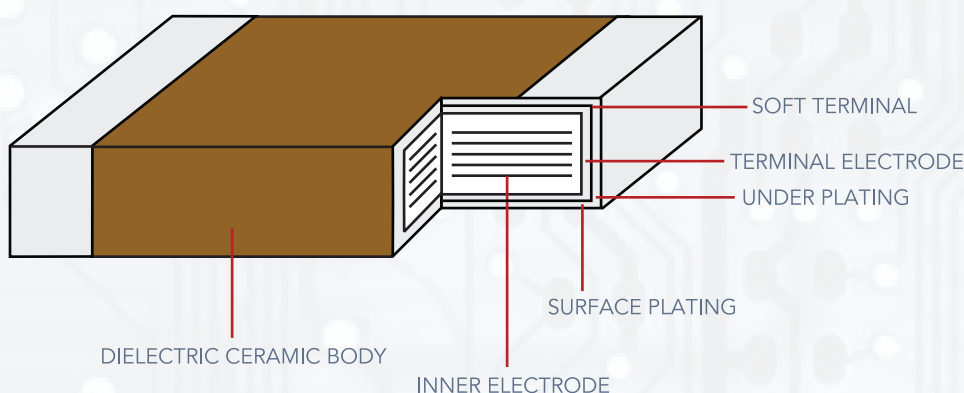
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	87.6	Barium Titanate	95	Barium Titanate (IV)	83.2200	12047-27-7	Ceramic	75.73	79.716	91	Y5V 1812 SERIES
		Barium Zirconate	5	Barium Zirconate	4.3800	12009-21-1		3.986			
Inner Electrode	5	Nickel	80	Nickel	4.0000	7440-02-0	Ni paste	3.64	4.55		
		Barium Titanate	20	Barium Titanate (IV)	1.0000	12047-27-7		0.91			
Terminal Electrode	7	Copper	88	Copper	6.1600	7440-50-8	Cu paste	5.606	6.37		
		Lead Free Glass	12	Lead Free Glass Frit	0.8400	65997-18-4		0.764			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.182	0.182		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.182	0.182		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC NPO
- DIMENSION 1825
- SIZE 180 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Strontium Oxide	13	Strontium Oxide	11.7780	1314-11-0	Ceramic	21.2	163.08	180	X7R 1825 SERIES
		Calcium Oxide	15	Calcium Oxide	13.5900	1305-78-8		24.46			
		Zirconium Dioxide	50	Zirconium Dioxide	45.3000	1314-23-4		81.55			
		Titanium Dioxide	2	Titanium Dioxide	1.8120	13463-67-7		3.26			
		Silica	15	Silica	13.5900	14808-60-7		24.46			
		Manganese Tetroxide	5	Manganese Tetroxide	4.5300	1317-35-7		8.15			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	4.32	5.4	180	X7R 1825 SERIES
		Barium Titanate	20	Barium Titanate	0.6000	12047-27-7		1.08			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	9.5	10.8	180	X7R 1825 SERIES
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		1.3			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.36	0.36	180	X7R 1825 SERIES
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.36	0.36	180	X7R 1825 SERIES

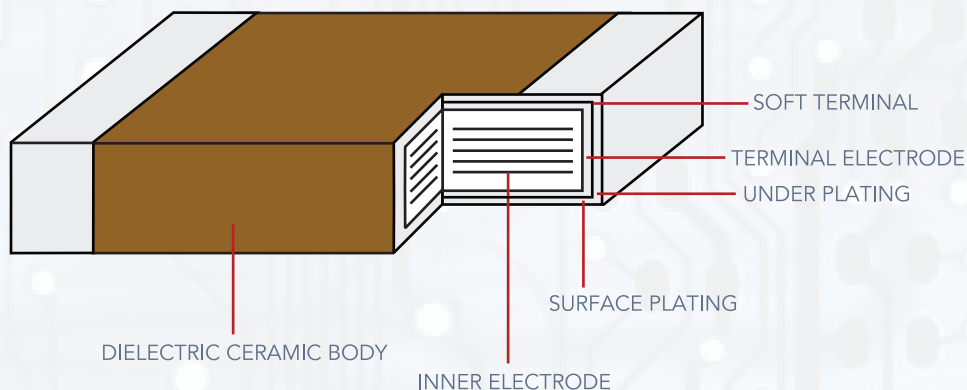


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7R
- DIMENSION 1825
- WEIGHT 180 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



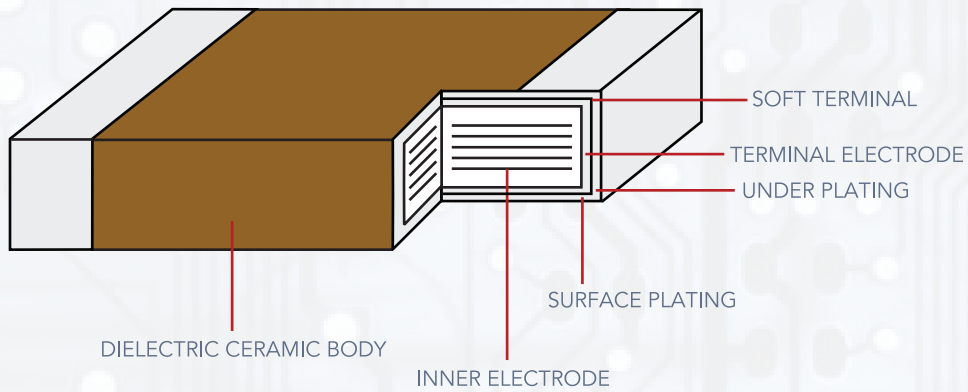
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	159.818	163.08	180	X7R 1825 SERIES
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		3.262			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	4.32	5.4		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		1.08			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	9.504	10.8		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		1.296			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.36	0.36		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.36	0.36		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC NPO
- DIMENSION 2220
- SIZE 180 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Strontium Oxide	13	Strontium Oxide	11.7780	1314-11-0	Ceramic	21.2	163.08	180	X7R 1825 SERIES
		Calcium Oxide	15	Calcium Oxide	13.5900	1305-78-8		24.46			
		Zirconium Dioxide	50	Zirconium Dioxide	45.3000	1314-23-4		81.55			
		Titanium Dioxide	2	Titanium Dioxide	1.8120	13463-67-7		3.26			
		Silica	15	Silica	13.5900	14808-60-7		24.46			
		Manganese Tetroxide	5	Manganese Tetroxide	4.5300	1317-35-7		8.15			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	4.32	5.4	180	X7R 1825 SERIES
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		1.08			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	9.5	10.8	180	X7R 1825 SERIES
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		1.3			
Under Plating	0.2	Ni	100	Ni	0.2000	7440-02-0	Ni plating	0.36	0.36	180	X7R 1825 SERIES
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.36	0.36	180	X7R 1825 SERIES

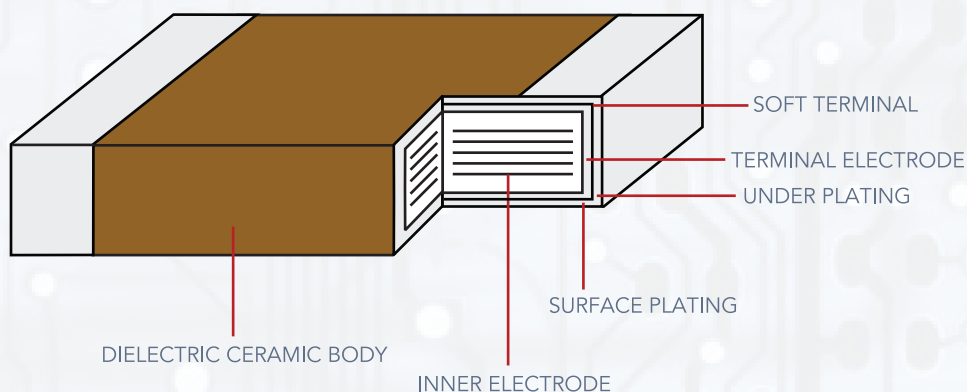


MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7R
- DIMENSION 2220
- WEIGHT 189 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



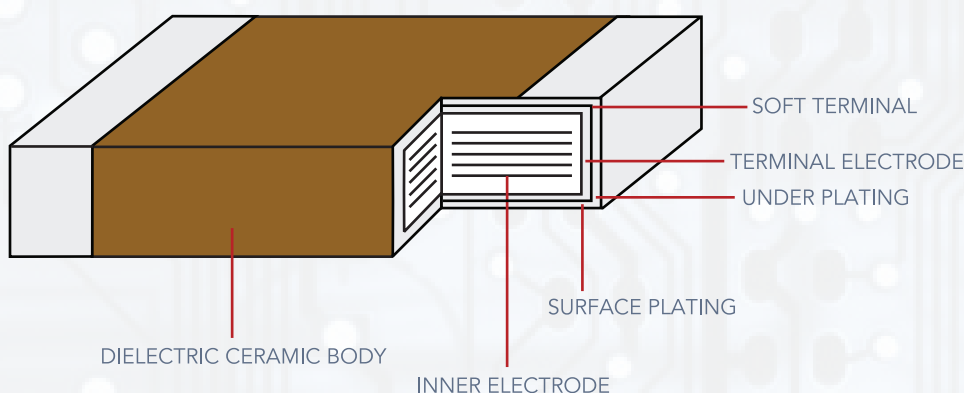
COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	167.809	171.234	189	X7R 2220 Series
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		3.425			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	4.536	5.67		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		1.134			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	9.979	11.34		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		1.361			
Under Plating	0.2	Nickel	100	Nickel	0.2000	7440-02-0	Ni plating	0.378	0.378		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.378	0.378		

MATERIAL DECLARATION

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CHV
- DIELECTRIC X7R
- DIMENSION 2225
- SIZE 325.7 mg
- WEIGHT Cal-Chip Electronics Inc.
- MANUFACTURE NAME 59 Steamwhistle Drive Ivyland, PA 18974
- ADDRESS

GENERAL COMPOSITION



COMPOSITION OF PARTS		COMPOSITION OF MATERIALS					CLASSIFICATION	TYPICAL WEIGHT			P/N
MATERIAL NAME	TYPICAL WT % IN PRODUCT	SUBSTANCE NAME	TYPICAL WT % IN MATERIAL	SUBSTANCE NAME	TYPICAL WT % IN PRODUCT	CAS NO.	USE / PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (MG)	MATERIAL WEIGHT (MG)	PRODUCT WEIGHT (MG)	PRODUCT
Dielectric Ceramic Body	90.6	Barium Titanate	98	Barium Titanate (IV)	88.7880	12047-27-7	Ceramic	289.183	295.085	325.7	X7R 2225 Series
		Yttrium Oxide	2	Yttrium Oxide	1.8120	1314-36-9		5.902			
Inner Electrode	3	Nickel	80	Nickel	2.4000	7440-02-0	Ni paste	7.817	9.771		
		Barium Titanate	20	Barium Titanate (IV)	0.6000	12047-27-7		1.954			
Terminal Electrode	6	Copper	88	Copper	5.2800	7440-50-8	Cu paste	17.197	19.542		
		Lead Free Glass	12	Lead Free Glass Frit	0.7200	65997-18-4		2.345			
Under Plating	0.2	Nickel	100	Nickel	0.2000	7440-02-0	Ni plating	0.651	0.651		
Surface Plating	0.2	Matte Sn	100	Matte Sn	0.2000	7440-31-5	Sn plating	0.651	0.651		

