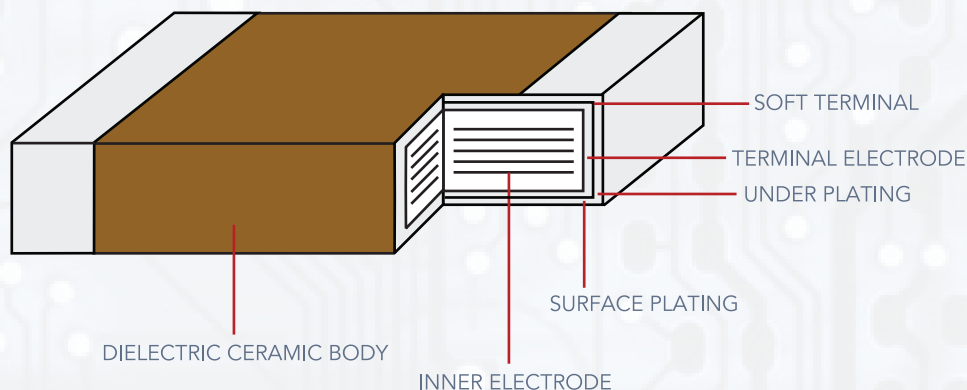


PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX-04
- SIZE 0402
- DIELECTRIC X7R
- WEIGHT 1.36 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION

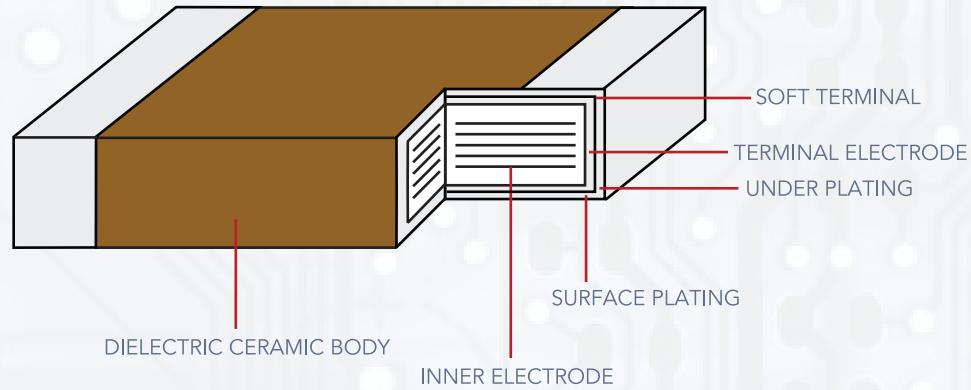


COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	86.05	Barium Titanate	98	Barium Titanate (IV)	84.3290	12047-27-7	Dielectric Body	1.148	1.171	1.36
		Yttrium Oxide	2	Yttrium Oxide	1.7210	1314-36-9		0.023		
Inner Electrode	2.85	Nickel	80	Nickel	2.2800	7440-02-0	Inner Electrode	0.031	0.039	
		Barium Titanate	20	Barium Titanate (IV)	0.5700	12047-27-7		0.008		
Terminal Electrode	1.90	Copper	88	Copper	1.6720	7440-50-8	Terminal Electrode	0.023	0.026	
		Lead Free Glass	12	Lead Free Glass Frit	0.2280	65997-18-4		0.003		
Soft Terminal	3.30	Silver	85	Silver	2.8050	7440-22-4	Soft Terminal	0.038	0.044	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.3300	9003-36-5		0.004		
		Phenolic Resin	5	Phenolic Resin	0.1650	9003-35-4		0.002		
Under Plating	3.54	Nickel	100	Ni	3.5400	7440-02-0	Plating	0.048	0.048	
Surface Plating	2.36	Matte Sn	100	Matte Sn	2.3600	7440-31-5	Plating	0.032	0.032	

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX04
- SIZE 0402
- DIALECTRIC CG
- WEIGHT 1.53 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



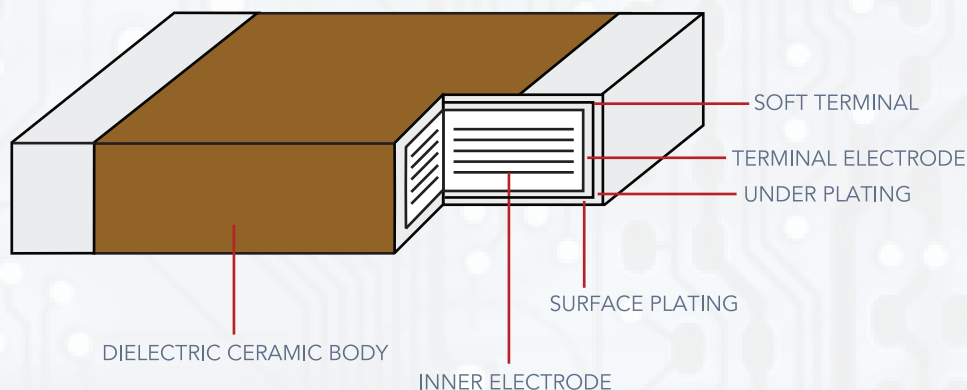
COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	89.92	Strontium Oxide	13	Strontium Oxide	11.6896	1314-11-0	Dielectric Body	0.179	1.376	1.53
		Calcium Oxide	15	Calcium Oxide	13.4880	1305-78-8		0.206		
		Zirconium Dioxide	50	Zirconium Dioxide	44.9600	1314-23-4		0.688		
		Titanium Dioxide	2	Titanium Dioxide	1.7984	13463-67-7		0.028		
		Silica	15	Silica	13.4880	14808-60-7		0.206		
		Manganese Tetroxide	5	Manganese Tetroxide	4.4960	1317-35-7		0.069		
Inner Electrode	2.98	Nickel	80	Nickel	2.3840	7440-02-0	Inner Electrode	0.036	0.045	1.53
		Barium Titanate	20	Barium Titanate (IV)	0.5960	12047-27-7		0.009		
Terminal Electrode	0.4	Copper	88	Copper	0.3520	7440-50-8	Terminal Electrode	0.005	0.006	1.53
		Lead Free Glass	12	Lead Free Glass Frit	0.0480	65997-18-4		0.001		
Soft Terminal	4.9	Silver	85	Silver	4.1650	7440-22-4	Soft Terminal	0.064	0.075	1.53
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.4900	9003-36-5		0.007		
		Phenolic Resin	5	Phenolic Resin	0.2450	9003-35-4		0.004		
Under Plating	1.08	Nickel	100	Ni	1.0800	7440-02-0	Plating	0.017	0.017	1.53
Surface Plating	0.72	Matte Sn	100	Matte Sn	0.7200	7440-31-5	Plating	0.011	0.011	1.53



PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX-10
- SIZE 0603
- DIELECTRIC X7R
- WEIGHT 5.7 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	86.05	Barium Titanate	98	Barium Titanate (IV)	84.3290	12047-27-7	Dielectric Body	4.807	4.905	5.7
		Yttrium Oxide	2	Yttrium Oxide	1.7210	1314-36-9		0.098		
Inner Electrode	2.85	Nickel	80	Nickel	2.2800	7440-02-0	Inner Electrode	0.13	0.162	
		Barium Titanate	20	Barium Titanate (IV)	0.5700	12047-27-7		0.032		
Terminal Electrode	1.90	Copper	88	Copper	1.6720	7440-50-8	Terminal Electrode	0.095	0.108	
		Lead Free Glass	12	Lead Free Glass Frit	0.2280	65997-18-4		0.013		
Soft Terminal	3.30	Silver	85	Silver	2.8050	7440-22-4	Soft Terminal	0.16	0.188	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.3300	9003-36-5		0.019		
		Phenolic Resin	5	Phenolic Resin	0.1650	9003-35-4		0.009		
Under Plating	3.54	Nickel	100	Ni	3.5400	7440-02-0	Plating	0.202	0.202	
Surface Plating	2.36	Matte Sn	100	Matte Sn	2.3600	7440-31-5	Plating	0.135	0.135	

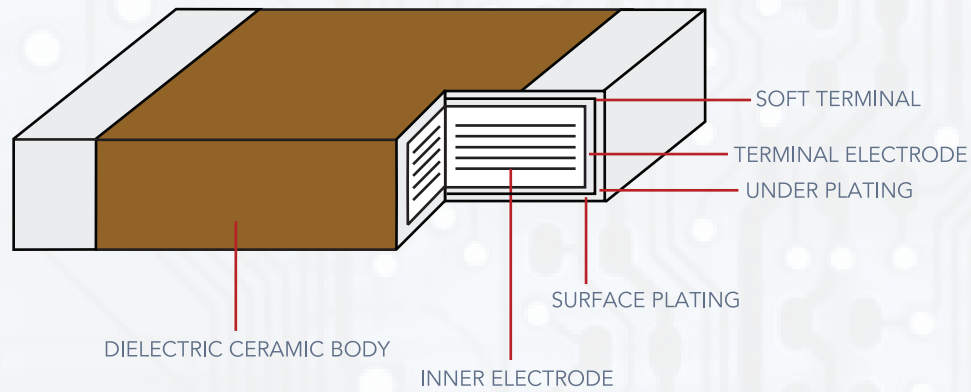
MATERIAL DECLARATION

GMX10

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX10
- SIZE 0603
- DIALECTRIC CG
- WEIGHT 5.5 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



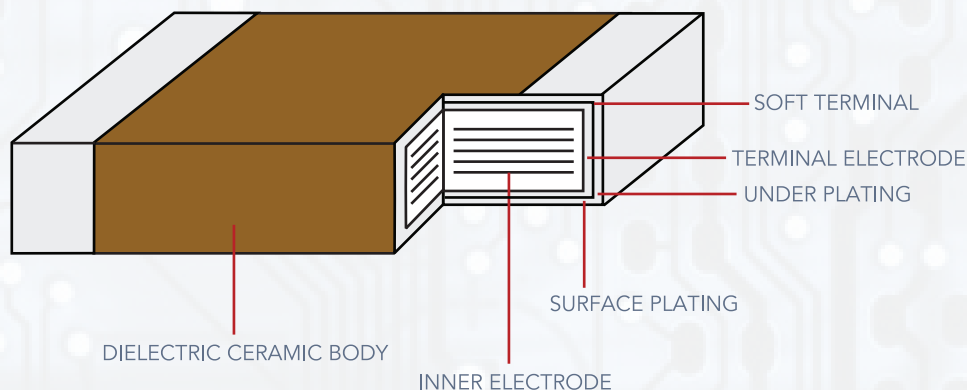
COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	89.92	Strontium Oxide	13	Strontium Oxide	11.6896	1314-11-0	Dielectric Body	0.643	4.946	5.5
		Calcium Oxide	15	Calcium Oxide	13.4880	1305-78-8		0.742		
		Zirconium Dioxide	50	Zirconium Dioxide	44.9600	1314-23-4		2.473		
		Titanium Dioxide	2	Titanium Dioxide	1.7984	13463-67-7		0.099		
		Silica	15	Silica	13.4880	14808-60-7		0.742		
		Manganese Tetroxide	5	Manganese Tetroxide	4.4960	1317-35-7		0.247		
Inner Electrode	2.98	Nickel	80	Nickel	2.3840	7440-02-0	Inner Electrode	0.131	0.164	
		Barium Titanate	20	Barium Titanate (IV)	0.5960	12047-27-7		0.033		
Terminal Electrode	0.4	Copper	88	Copper	0.3520	7440-50-8	Terminal Electrode	0.019	0.022	
		Lead Free Glass	12	Lead Free Glass Frit	0.0480	65997-18-4		0.003		
Soft Terminal	4.9	Silver	85	Silver	4.1650	7440-22-4	Soft Terminal	0.229	0.269	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.4900	9003-36-5		0.027		
		Phenolic Resin	5	Phenolic Resin	0.2450	9003-35-4		0.013		
Under Plating	1.08	Nickel	100	Ni	1.0800	7440-02-0	Plating	0.059	0.059	
Surface Plating	0.72	Matte Sn	100	Matte Sn	0.7200	7440-31-5	Plating	0.04	0.04	



PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX21
- SIZE 0805
- DIELECTRIC X7R
- WEIGHT 17.76 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	86.05	Barium Titanate	98	Barium Titanate (IV)	84.3290	12047-27-7	Dielectric Body	14.977	15.283	17.76
		Yttrium Oxide	2	Yttrium Oxide	1.7210	1314-36-9		0.306		
Inner Electrode	2.85	Nickel	80	Nickel	2.2800	7440-02-0	Inner Electrode	0.405	0.506	
		Barium Titanate	20	Barium Titanate (IV)	0.5700	12047-27-7		0.101		
Terminal Electrode	1.90	Copper	88	Copper	1.6720	7440-50-8	Terminal Electrode	0.297	0.337	
		Lead Free Glass	12	Lead Free Glass Frit	0.2280	65997-18-4		0.04		
Soft Terminal	3.30	Silver	85	Silver	2.8050	7440-22-4	Soft Terminal	0.498	0.586	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.3300	9003-36-5		0.059		
		Phenolic Resin	5	Phenolic Resin	0.1650	9003-35-4		0.029		
Under Plating	3.54	Nickel	100	Ni	3.5400	7440-02-0	Plating	0.629	0.629	
Surface Plating	2.36	Matte Sn	100	Matte Sn	2.3600	7440-31-5	Plating	0.419	0.419	

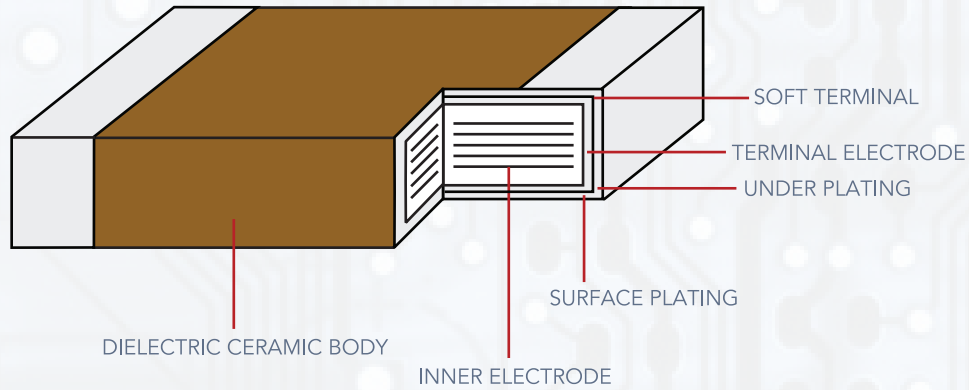
MATERIAL DECLARATION

GMX21

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX21
- SIZE 0805
- DIALECTRIC CG
- WEIGHT 8.4 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



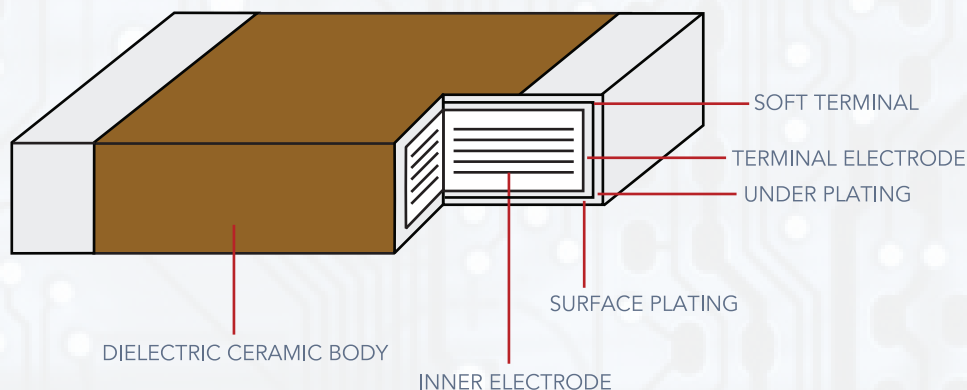
COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	89.92	Strontium Oxide	13	Strontium Oxide	11.6896	1314-11-0	Dielectric Body	0.982	7.553	8.4
		Calcium Oxide	15	Calcium Oxide	13.4880	1305-78-8		1.133		
		Zirconium Dioxide	50	Zirconium Dioxide	44.9600	1314-23-4		3.776		
		Titanium Dioxide	2	Titanium Dioxide	1.7984	13463-67-7		0.151		
		Silica	15	Silica	13.4880	14808-60-7		1.133		
		Manganese Tetroxide	5	Manganese Tetroxide	4.4960	1317-35-7		0.378		
Inner Electrode	2.98	Nickel	80	Nickel	2.3840	7440-02-0	Inner Electrode	0.2	0.25	8.4
		Barium Titanate	20	Barium Titanate (IV)	0.5960	12047-27-7		0.05		
Terminal Electrode	0.4	Copper	88	Copper	0.3520	7440-50-8	Terminal Electrode	0.03	0.034	8.4
		Lead Free Glass	12	Lead Free Glass Frit	0.0480	65997-18-4		0.004		
Soft Terminal	4.9	Silver	85	Silver	4.1650	7440-22-4	Soft Terminal	0.35	0.412	8.4
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.4900	9003-36-5		0.041		
		Phenolic Resin	5	Phenolic Resin	0.2450	9003-35-4		0.021		
Under Plating	1.08	Nickel	100	Ni	1.0800	7440-02-0	Plating	0.091	0.091	8.4
Surface Plating	0.72	Matte Sn	100	Matte Sn	0.7200	7440-31-5	Plating	0.06	0.06	8.4



PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX31
- SIZE 1206
- DIELECTRIC X7R
- WEIGHT 34.79 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION

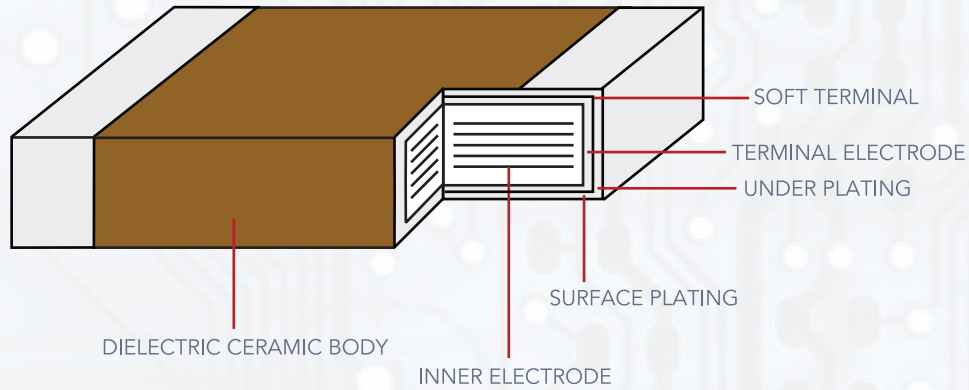


COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	86.05	Barium Titanate	98	Barium Titanate (IV)	84.3290	12047-27-7	Dielectric Body	29.338	29.937	34.79
		Yttrium Oxide	2	Yttrium Oxide	1.7210	1314-36-9		0.599		
Inner Electrode	2.85	Nickel	80	Nickel	2.2800	7440-02-0	Inner Electrode	0.793	0.991	
		Barium Titanate	20	Barium Titanate (IV)	0.5700	12047-27-7		0.198		
Terminal Electrode	1.90	Copper	88	Copper	1.6720	7440-50-8	Terminal Electrode	0.582	0.661	
		Lead Free Glass	12	Lead Free Glass Frit	0.2280	65997-18-4		0.079		
Soft Terminal	3.30	Silver	85	Silver	2.8050	7440-22-4	Soft Terminal	0.976	1.148	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.3300	9003-36-5		0.115		
		Phenolic Resin	5	Phenolic Resin	0.1650	9003-35-4		0.057		
Under Plating	3.54	Nickel	100	Ni	3.5400	7440-02-0	Plating	1.232	1.232	
Surface Plating	2.36	Matte Sn	100	Matte Sn	2.3600	7440-31-5	Plating	0.821	0.821	

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX31
- SIZE 1206
- DIALECTRIC CG
- WEIGHT 21.3 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



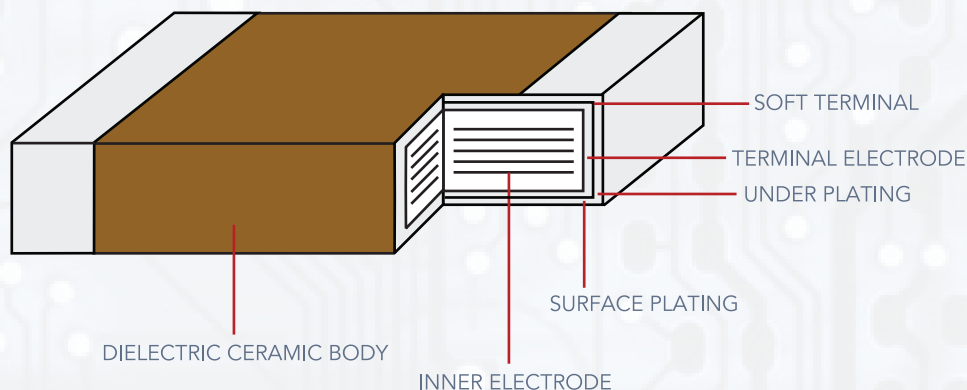
COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	89.92	Strontium Oxide	13	Strontium Oxide	11.6896	1314-11-0	Dielectric Body	2.49	19.154	21.3
		Calcium Oxide	15	Calcium Oxide	13.4880	1305-78-8		2.873		
		Zirconium Dioxide	50	Zirconium Dioxide	44.9600	1314-23-4		9.577		
		Titanium Dioxide	2	Titanium Dioxide	1.7984	13463-67-7		0.383		
		Silica	15	Silica	13.4880	14808-60-7		2.873		
		Manganese Tetroxide	5	Manganese Tetroxide	4.4960	1317-35-7		0.958		
Inner Electrode	2.98	Nickel	80	Nickel	2.3840	7440-02-0	Inner Electrode	0.508	0.635	
		Barium Titanate	20	Barium Titanate (IV)	0.5960	12047-27-7		0.127		
Terminal Electrode	0.4	Copper	88	Copper	0.3520	7440-50-8	Terminal Electrode	0.075	0.085	
		Lead Free Glass	12	Lead Free Glass Frit	0.0480	65997-18-4		0.01		
Soft Terminal	4.9	Silver	85	Silver	4.1650	7440-22-4	Soft Terminal	0.887	1.043	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.4900	9003-36-5		0.104		
		Phenolic Resin	5	Phenolic Resin	0.2450	9003-35-4		0.052		
Under Plating	1.08	Nickel	100	Ni	1.0800	7440-02-0	Plating	0.23	0.23	
Surface Plating	0.72	Matte Sn	100	Matte Sn	0.7200	7440-31-5	Plating	0.153	0.153	



PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX32
- SIZE 1210
- DIELECTRIC X7R
- WEIGHT 95.5 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION

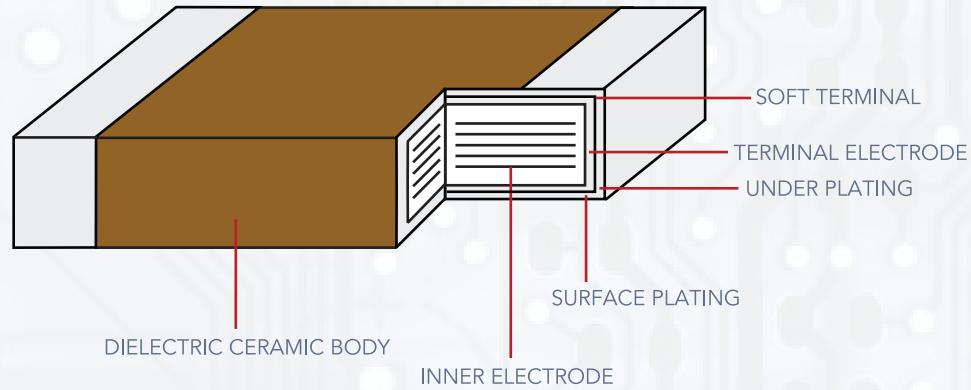


COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	86.05	Barium Titanate	98	Barium Titanate (IV)	84.3290	12047-27-7	Dielectric Body	80.533	82.177	95.5
		Yttrium Oxide	2	Yttrium Oxide	1.7210	1314-36-9		1.644		
Inner Electrode	2.85	Nickel	80	Nickel	2.2800	7440-02-0	Inner Electrode	2.177	2.721	
		Barium Titanate	20	Barium Titanate (IV)	0.5700	12047-27-7		0.544		
Terminal Electrode	1.90	Copper	88	Copper	1.6720	7440-50-8	Terminal Electrode	1.597	1.815	
		Lead Free Glass	12	Lead Free Glass Frit	0.2280	65997-18-4		0.218		
Soft Terminal	3.30	Silver	85	Silver	2.8050	7440-22-4	Soft Terminal	2.679	3.152	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.3300	9003-36-5		0.315		
		Phenolic Resin	5	Phenolic Resin	0.1650	9003-35-4		0.158		
Under Plating	3.54	Nickel	100	Ni	3.5400	7440-02-0	Plating	3.381	3.381	
Surface Plating	2.36	Matte Sn	100	Matte Sn	2.3600	7440-31-5	Plating	2.254	2.254	

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX32
- SIZE 1210
- DIALECTRIC CG
- WEIGHT 43 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



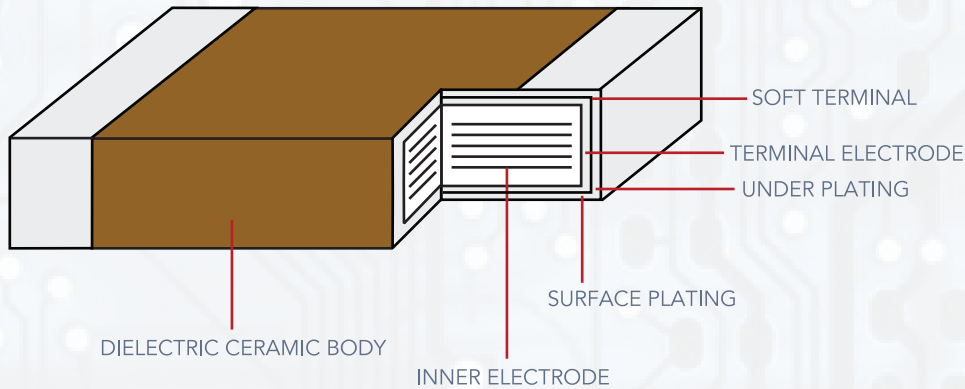
COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	89.92	Strontium Oxide	13	Strontium Oxide	11.6896	1314-11-0	Dielectric Body	5.027	38.666	43
		Calcium Oxide	15	Calcium Oxide	13.4880	1305-78-8		5.8		
		Zirconium Dioxide	50	Zirconium Dioxide	44.9600	1314-23-4		19.333		
		Titanium Dioxide	2	Titanium Dioxide	1.7984	13463-67-7		0.773		
		Silica	15	Silica	13.4880	14808-60-7		5.8		
		Manganese Tetroxide	5	Manganese Tetroxide	4.4960	1317-35-7		1.933		
Inner Electrode	2.98	Nickel	80	Nickel	2.3840	7440-02-0	Inner Electrode	1.025	1.281	43
		Barium Titanate	20	Barium Titanate (IV)	0.5960	12047-27-7		0.256		
Terminal Electrode	0.4	Copper	88	Copper	0.3520	7440-50-8	Terminal Electrode	0.151	0.172	43
		Lead Free Glass	12	Lead Free Glass Frit	0.0480	65997-18-4		0.021		
Soft Terminal	4.9	Silver	85	Silver	4.1650	7440-22-4	Soft Terminal	1.791	2.107	43
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.4900	9003-36-5		0.211		
		Phenolic Resin	5	Phenolic Resin	0.2450	9003-35-4		0.105		
Under Plating	1.08	Nickel	100	Ni	1.0800	7440-02-0	Plating	0.464	0.464	43
Surface Plating	0.72	Matte Sn	100	Matte Sn	0.7200	7440-31-5	Plating	0.31	0.31	43



PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX40
- SIZE 1808
- DIELECTRIC X7R
- WEIGHT 71.7 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION

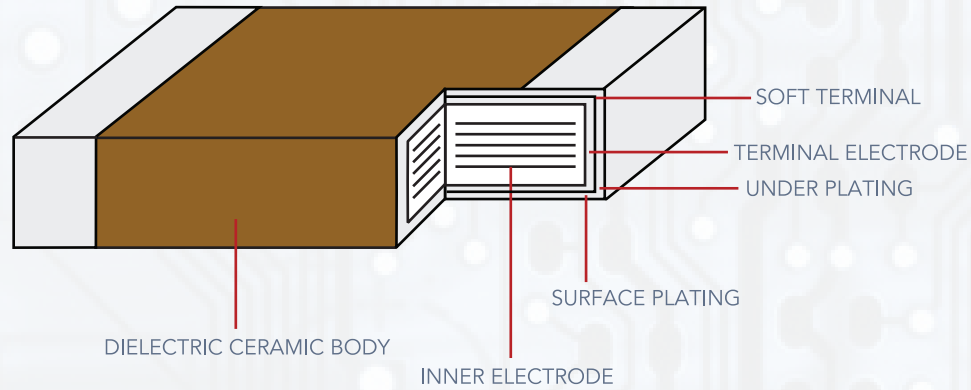


COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	86.05	Barium Titanate	98	Barium Titanate (IV)	84.3290	12047-27-7	Dielectric Body	60.464	61.698	71.7
		Yttrium Oxide	2	Yttrium Oxide	1.7210	1314-36-9		1.234		
Inner Electrode	2.85	Nickel	80	Nickel	2.2800	7440-02-0	Inner Electrode	1.635	2.044	
		Barium Titanate	20	Barium Titanate (IV)	0.5700	12047-27-7		0.409		
Terminal Electrode	1.90	Copper	88	Copper	1.6720	7440-50-8	Terminal Electrode	1.199	1.362	
		Lead Free Glass	12	Lead Free Glass Frit	0.2280	65997-18-4		0.163		
Soft Terminal	3.30	Silver	85	Silver	2.8050	7440-22-4	Soft Terminal	2.011	2.366	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.3300	9003-36-5		0.237		
		Phenolic Resin	5	Phenolic Resin	0.1650	9003-35-4		0.118		
Under Plating	3.54	Nickel	100	Ni	3.5400	7440-02-0	Plating	2.538	2.538	
Surface Plating	2.36	Matte Sn	100	Matte Sn	2.3600	7440-31-5	Plating	1.692	1.692	

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES CMX40
- SIZE 1808
- DIALECTRIC CG
- WEIGHT 71.5 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



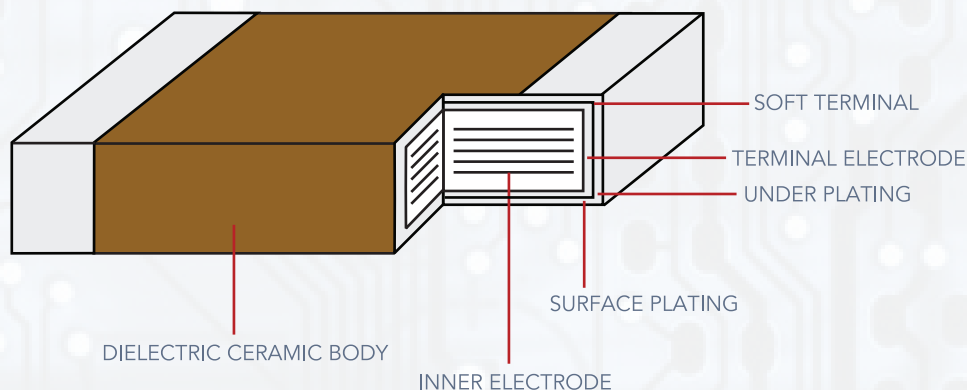
COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	89.92	Strontium Oxide	13	Strontium Oxide	11.6896	1314-11-0	Dielectric Body	8.358	64.293	71.5
		Calcium Oxide	15	Calcium Oxide	13.4880	1305-78-8		9.644		
		Zirconium Dioxide	50	Zirconium Dioxide	44.9600	1314-23-4		32.146		
		Titanium Dioxide	2	Titanium Dioxide	1.7984	13463-67-7		1.286		
		Silica	15	Silica	13.4880	14808-60-7		9.644		
		Manganese Tetroxide	5	Manganese Tetroxide	4.4960	1317-35-7		3.215		
Inner Electrode	2.98	Nickel	80	Nickel	2.3840	7440-02-0	Inner Electrode	1.705	2.131	
		Barium Titanate	20	Barium Titanate (IV)	0.5960	12047-27-7		0.426		
Terminal Electrode	0.4	Copper	88	Copper	0.3520	7440-50-8	Terminal Electrode	0.252	0.286	
		Lead Free Glass	12	Lead Free Glass Frit	0.0480	65997-18-4		0.034		
Soft Terminal	4.9	Silver	85	Silver	4.1650	7440-22-4	Soft Terminal	2.978	3.503	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.4900	9003-36-5		0.35		
		Phenolic Resin	5	Phenolic Resin	0.2450	9003-35-4		0.175		
Under Plating	1.08	Nickel	100	Ni	1.0800	7440-02-0	Plating	0.772	0.772	
Surface Plating	0.72	Matte Sn	100	Matte Sn	0.7200	7440-31-5	Plating	0.515	0.515	



PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX43
- SIZE 1812
- DIELECTRIC X7R
- WEIGHT 91.2 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	86.05	Barium Titanate	98	Barium Titanate (IV)	84.3290	12047-27-7	Dielectric Body	76.909	78.479	91.2
		Yttrium Oxide	2	Yttrium Oxide	1.7210	1314-36-9		1.57		
Inner Electrode	2.85	Nickel	80	Nickel	2.2800	7440-02-0	Inner Electrode	2.079	2.599	
		Barium Titanate	20	Barium Titanate (IV)	0.5700	12047-27-7		0.52		
Terminal Electrode	1.90	Copper	88	Copper	1.6720	7440-50-8	Terminal Electrode	1.525	1.733	
		Lead Free Glass	12	Lead Free Glass Frit	0.2280	65997-18-4		0.208		
Soft Terminal	3.30	Silver	85	Silver	2.8050	7440-22-4	Soft Terminal	2.558	3.009	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.3300	9003-36-5		0.301		
		Phenolic Resin	5	Phenolic Resin	0.1650	9003-35-4		0.15		
Under Plating	3.54	Nickel	100	Ni	3.5400	7440-02-0	Plating	3.228	3.228	
Surface Plating	2.36	Matte Sn	100	Matte Sn	2.3600	7440-31-5	Plating	2.152	2.152	

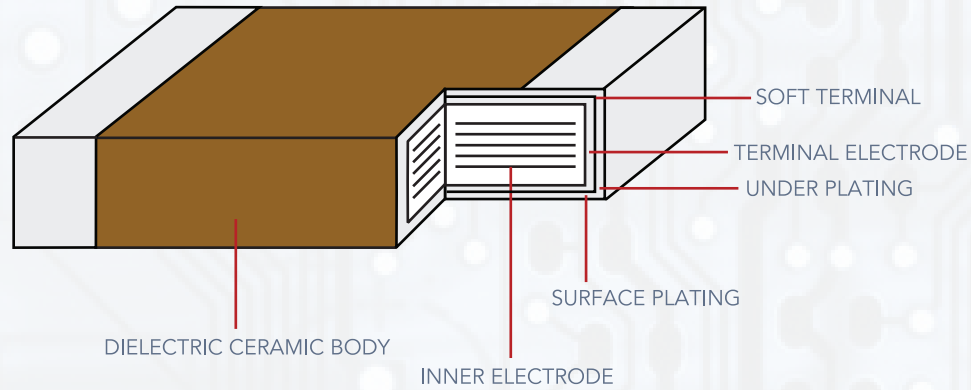
MATERIAL DECLARATION

GMX43

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX43
- SIZE 1812
- DIALECTRIC CG
- WEIGHT 91 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



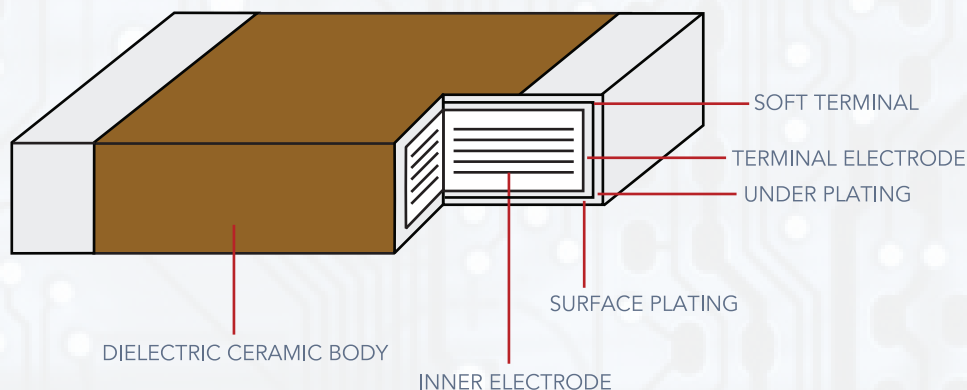
COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	EXEMPTION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL		SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	89.92	Strontium Oxide	13	Strontium Oxide	11.6896	1314-11-0	Dielectric Body		10.638	81.828	91
		Calcium Oxide	15	Calcium Oxide	13.4880	1305-78-8			12.274		
		Zirconium Dioxide	50	Zirconium Dioxide	44.9600	1314-23-4			40.914		
		Titanium Dioxide	2	Titanium Dioxide	1.7984	13463-67-7			1.637		
		Silica	15	Silica	13.4880	14808-60-7			12.274		
		Manganese Tetroxide	5	Manganese Tetroxide	4.4960	1317-35-7			4.091		
Inner Electrode	2.98	Nickel	80	Nickel	2.3840	7440-02-0	Inner Electrode		2.169	2.711	
		Barium Titanate	20	Barium Titanate (IV)	0.5960	12047-27-7			0.542		
Terminal Electrode	0.4	Copper	88	Copper	0.3520	7440-50-8	Terminal Electrode		0.32	0.364	
		Lead Free Glass	12	Lead Free Glass Frit	0.0480	65997-18-4			0.044		
Soft Terminal	4.9	Silver	85	Silver	4.1650	7440-22-4	Soft Terminal		3.79	4.459	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.4900	9003-36-5			0.446		
		Phenolic Resin	5	Phenolic Resin	0.2450	9003-35-4			0.223		
Under Plating	1.08	Nickel	100	Ni	1.0800	7440-02-0	Plating		0.983	0.983	
Surface Plating	0.72	Matte Sn	100	Matte Sn	0.7200	7440-31-5	Plating		0.655	0.655	



PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX45
- SIZE 1825
- DIELECTRIC CG
- WEIGHT 283.9 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	89.92	Strontium Oxide	13	Strontium Oxide	11.6896	1314-11-0	Dielectric Body	33.187	255.284	283.9
		Calcium Oxide	15	Calcium Oxide	13.4880	1305-78-8		38.292		
		Zirconium Dioxide	50	Zirconium Dioxide	44.9600	1314-23-4		127.643		
		Titanium Dioxide	2	Titanium Dioxide	1.7984	13463-67-7		5.106		
		Silica	15	Silica	13.4880	14808-60-7		38.292		
		Manganese Tetroxide	5	Manganese Tetroxide	4.4960	1317-35-7		12.764		
Inner Electrode	2.98	Nickel	80	Nickel	2.3840	7440-02-0	Inner Electrode	6.768	8.46	
		Barium Titanate	20	Barium Titanate (IV)	0.5960	12047-27-7		1.692		
Terminal Electrode	0.4	Copper	88	Copper	0.3520	7440-50-8	Terminal Electrode	0.999	1.135	
		Lead Free Glass	12	Lead Free Glass Frit	0.0480	65997-18-4		0.136		
Soft Terminal	4.9	Silver	85	Silver	4.1650	7440-22-4	Soft Terminal	11.824	13.911	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.4900	9003-36-5		1.391		
		Phenolic Resin	5	Phenolic Resin	0.2450	9003-35-4		0.696		
Under Plating	1.08	Nickel	100	Ni	1.0800	7440-02-0	Plating	3.066	3.066	
Surface Plating	0.72	Matte Sn	100	Matte Sn	0.7200	7440-31-5	Plating	2.044	2.044	

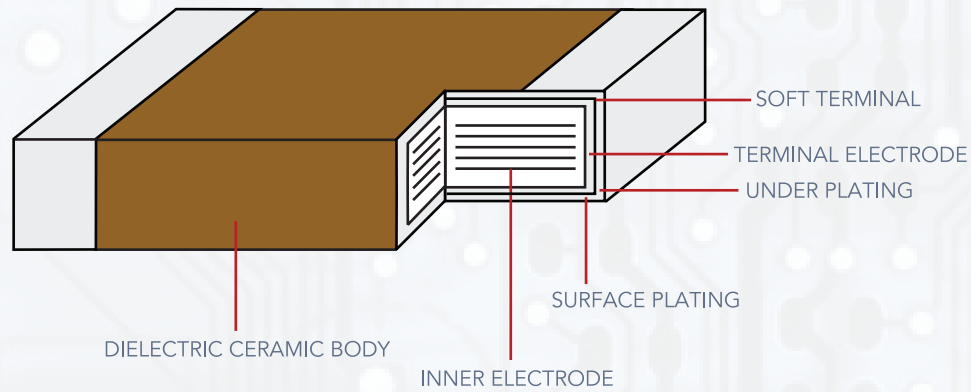
MATERIAL DECLARATION

GMX55

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX55
- SIZE 2220
- DIALECTRIC X7R
- WEIGHT 318 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



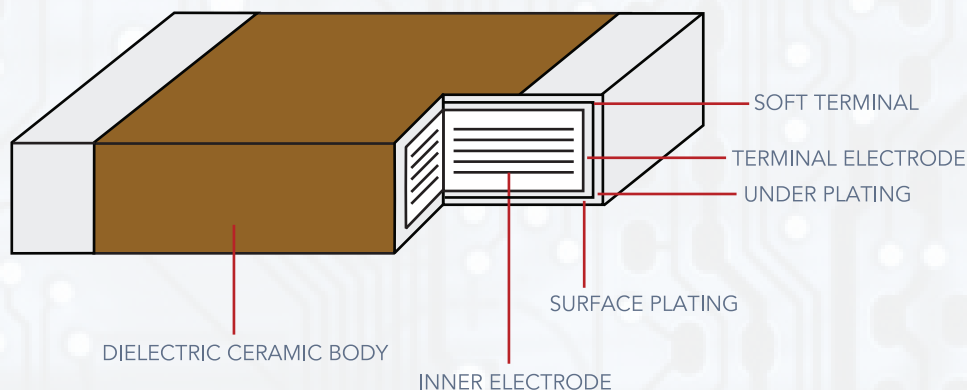
COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	89.57	Barium Titanate	98	Barium Titanate (IV)	87.7786	12047-27-7	Dielectric Body	279.136	284.833	318
		Yttrium Oxide	2	Yttrium Oxide	1.7914	1314-36-9		5.697		
Inner Electrode	3.51	Nickel	80	Nickel	2.8080	7440-02-0	Inner Electrode	8.929	11.161	
		Barium Titanate	20	Barium Titanate (IV)	0.7020	12047-27-7		2.232		
Terminal Electrode	3.44	Copper	88	Copper	3.0272	7440-50-8	Terminal Electrode	9.626	10.939	
		Lead Free Glass	12	Lead Free Glass Frit	0.4128	65997-18-4		1.313		
Soft Terminal	3.44	Silver	85	Silver	2.9240	7440-22-4	Soft Terminal	9.298	10.939	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.3440	9003-36-5		1.094		
		Phenolic Resin	5	Phenolic Resin	0.1720	9003-35-4		0.547		
Under Plating	0.02	Nickel	100	Ni	0.0200	7440-02-0	Plating	0.064	0.064	
Surface Plating	0.02	Matte Sn	100	Matte Sn	0.0200	7440-31-5	Plating	0.064	0.064	



PRODUCT IDENTIFICATION

- PRODUCT NAME: Capacitor (MLCC)
- SERIES: GMX55
- SIZE: 2220
- DIELECTRIC: CG
- WEIGHT: 279.4 mg
- MANUFACTURE NAME: Cal-Chip Electronics Inc.
- ADDRESS: 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION

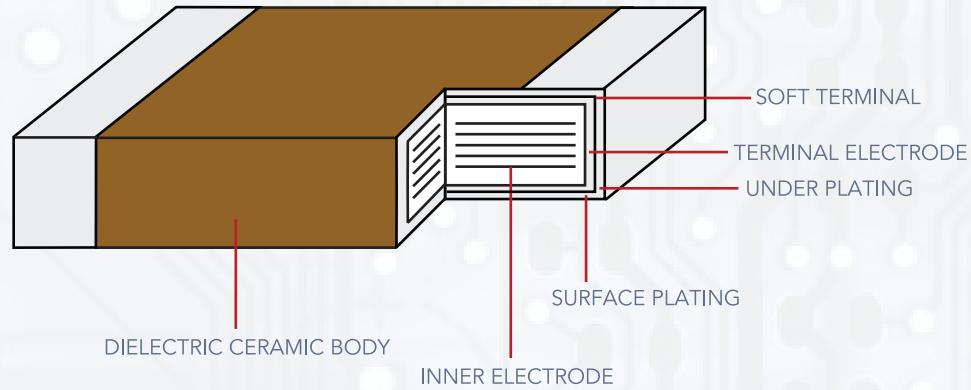


COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	89.92	Strontium Oxide	13	Strontium Oxide	11.6896	1314-11-0	Dielectric Body	32.661	251.236	279.4
		Calcium Oxide	15	Calcium Oxide	13.4880	1305-78-8		37.685		
		Zirconium Dioxide	50	Zirconium Dioxide	44.9600	1314-23-4		125.618		
		Titanium Dioxide	2	Titanium Dioxide	1.7984	13463-67-7		5.025		
		Silica	15	Silica	13.4880	14808-60-7		37.685		
		Manganese Tetroxide	5	Manganese Tetroxide	4.4960	1317-35-7		12.562		
Inner Electrode	2.98	Nickel	80	Nickel	2.3840	7440-02-0	Inner Electrode	6.661	8.326	
		Barium Titanate	20	Barium Titanate (IV)	0.5960	12047-27-7		1.665		
Terminal Electrode	0.4	Copper	88	Copper	0.3520	7440-50-8	Terminal Electrode	0.983	1.117	
		Lead Free Glass	12	Lead Free Glass Frit	0.0480	65997-18-4		0.134		
Soft Terminal	4.9	Silver	85	Silver	4.1650	7440-22-4	Soft Terminal	11.637	13.691	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.4900	9003-36-5		1.369		
		Phenolic Resin	5	Phenolic Resin	0.2450	9003-35-4		0.685		
Under Plating	1.08	Nickel	100	Ni	1.0800	7440-02-0	Plating	3.018	3.018	
Surface Plating	0.72	Matte Sn	100	Matte Sn	0.7200	7440-31-5	Plating	2.012	2.012	

PRODUCT IDENTIFICATION

- PRODUCT NAME Capacitor (MLCC)
- SERIES GMX57
- SIZE 2225
- DIALECTRIC CG
- WEIGHT 325.7 mg
- MANUFACTURE NAME Cal-Chip Electronics Inc.
- ADDRESS 59 Steamwhistle Drive Ivyland, PA 18974

GENERAL COMPOSITION



COMPOSITION OF PARTS		MATERIAL					CLASSIFICATION	TYPICAL WEIGHT		
MATERIAL NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	SUBSTANCE NAME	TYPICAL WT% IN PRODUCT	CAS NO.	USE/PURPOSE OF MATERIAL	SUBSTANCE WEIGHT (mg)	MATERIAL WEIGHT (mg)	PRODUCT WEIGHT (mg)
Dielectric Ceramic Body	89.92	Strontium Oxide	13	Strontium Oxide	11.6896	1314-11-0	Dielectric Body	38.073	292.87	325.7
		Calcium Oxide	15	Calcium Oxide	13.4880	1305-78-8		43.93		
		Zirconium Dioxide	50	Zirconium Dioxide	44.9600	1314-23-4		146.437		
		Titanium Dioxide	2	Titanium Dioxide	1.7984	13463-67-7		5.857		
		Silica	15	Silica	13.4880	14808-60-7		43.93		
		Manganese Tetroxide	5	Manganese Tetroxide	4.4960	1317-35-7		14.643		
Inner Electrode	2.98	Nickel	80	Nickel	2.3840	7440-02-0	Inner Electrode	7.765	9.706	
		Barium Titanate	20	Barium Titanate (IV)	0.5960	12047-27-7		1.941		
Terminal Electrode	0.4	Copper	88	Copper	0.3520	7440-50-8	Terminal Electrode	1.146	1.302	
		Lead Free Glass	12	Lead Free Glass Frit	0.0480	65997-18-4		0.156		
Soft Terminal	4.9	Silver	85	Silver	4.1650	7440-22-4	Soft Terminal	13.565	15.959	
		Phenolic Epoxy Resin	10	Phenolic Epoxy Resin	0.4900	9003-36-5		1.596		
		Phenolic Resin	5	Phenolic Resin	0.2450	9003-35-4		0.798		
Under Plating	1.08	Nickel	100	Ni	1.0800	7440-02-0	Plating	3.518	3.518	
Surface Plating	0.72	Matte Sn	100	Matte Sn	0.7200	7440-31-5	Plating	2.345	2.345	

