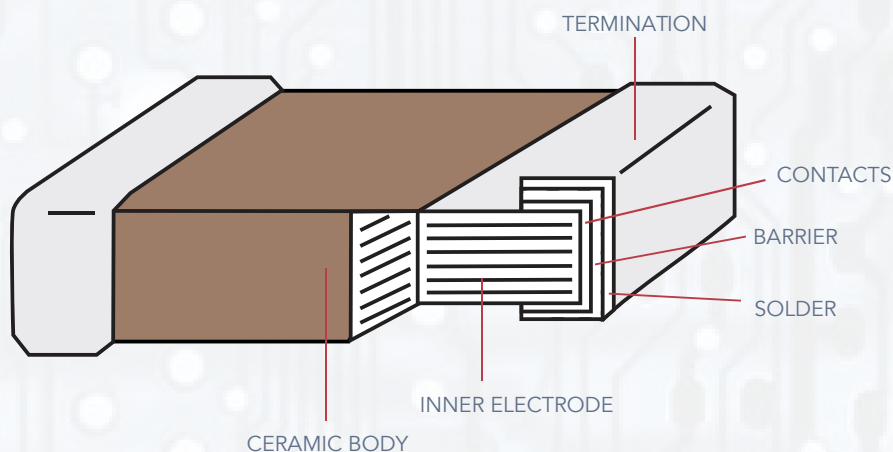


## PRODUCT IDENTIFICATION

- PRODUCT NAME                      Capacitor (MLCC)
- SERIES                                GMC21
- SIZE                                    0805
- DIALECTRIC                         C0G
- WEIGHT                                7.1 (max)
- MANUFACTURE NAME            Cal-Chip Electronics Inc.
- ADDRESS                             59 Steamwhistle Drive Ivyland, PA 18974
- RESPONSIBLE PERSON NAME    Frank Salamone
- TELEPHONE                         215.942.8900

## GENERAL COMPOSITION



PART	MATERIAL		WEIGHT (mg)	% OF PART	% OF COMPONENT	CAS NO.
Body	Inner Electrode	Ni	0.14	2.15	2.03	7440-02-0
	Dielectric	Calcium Magnesium Titanate	6.56	97.85	92.40	12047-27-7
SUBTOTAL			6.70	100.00	94.42	
Termination	Contact with Ceramic	Cu	0.261	65.829	3.674	7440-50-8
	Barrier Layer	Ni	0.017	4.290	0.239	7440-02-0
	Solder Platin	Sn	0.118	29.881	1.668	7440-31-5
SUBTOTAL			0.40	100.00	5.58	
ALL PARTS TOTAL			7.1		100	

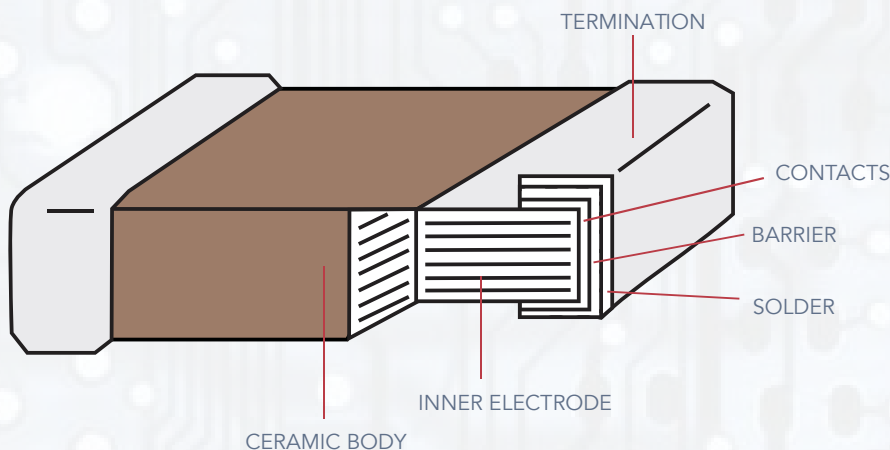
# MATERIAL DECLARATION

GMC21-X7R

## PRODUCT IDENTIFICATION

- PRODUCT NAME                      Capacitor (MLCC)
- SERIES                                GMC21
- SIZE                                    0805
- DIALECTRIC                        X7R
- WEIGHT                                16.8 (max)
- MANUFACTURE NAME            Cal-Chip Electronics Inc.
- ADDRESS                              59 Steamwhistle Drive Ivyland, PA 18974
- RESPONSIBLE PERSON NAME    Frank Salamone
- TELEPHONE                          215.942.8900

## GENERAL COMPOSITION



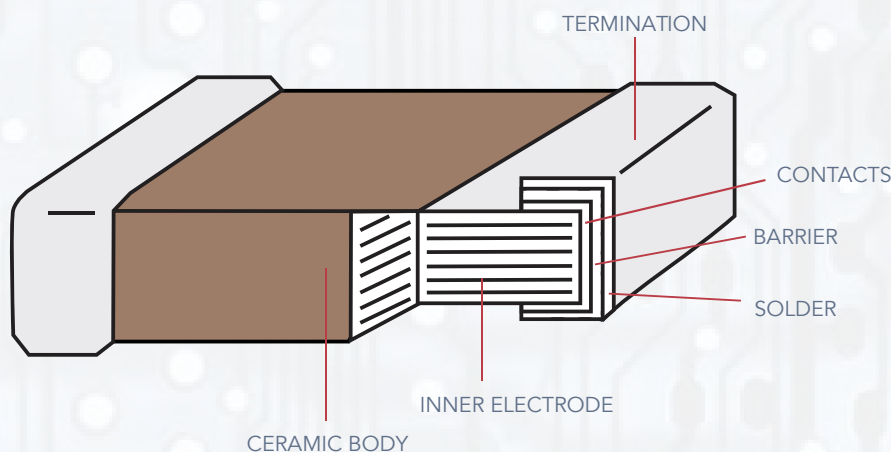
PART	MATERIAL		WEIGHT (mg)	% OF PART	% OF COMPONENT	CAS NO.
Body	Inner Electrode	Ni	0.67	4.06	3.96	7440-02-0
	Dielectric	BaTiO <sub>3</sub>	15.75	95.94	93.78	12047-27-7
SUBTOTAL			16.42	100	97.74	
Termination	Contact with Ceramic	Cu	0.261	68.81	1.55	7440-50-8
	Barrier Layer	Ni	0.017	4.48	0.10	7440-02-0
	Solder Platin	Sn	0.101	26.71	0.60	7440-31-5
SUBTOTAL			0.38	100	2.26	
ALL PARTS TOTAL			16.8		100	



## PRODUCT IDENTIFICATION

- PRODUCT NAME                      Capacitor (MLCC)
- SERIES                                GMC21
- SIZE                                    0805
- DIALECTRIC                         X7S
- WEIGHT                                16.8 (max)
- MANUFACTURE NAME                Cal-Chip Electronics Inc.
- ADDRESS                             59 Steamwhistle Drive Ivyland, PA 18974
- RESPONSIBLE PERSON NAME        Frank Salamone
- TELEPHONE                          215.942.8900

## GENERAL COMPOSITION



PART	MATERIAL		WEIGHT (mg)	% OF PART	% OF COMPONENT	CAS NO.
Body	Inner Electrode	Ni	0.67	4.06	3.96	7440-02-0
	Dielectric	BaTiO <sub>3</sub>	15.75	95.94	93.78	12047-27-7
SUBTOTAL			16.42	100	97.74	
Termination	Contact with Ceramic	Cu	0.261	68.81	1.55	7440-50-8
	Barrier Layer	Ni	0.017	4.48	0.10	7440-02-0
	Solder Platin	Sn	0.101	26.71	0.60	7440-31-5
SUBTOTAL			0.38	100	2.26	
ALL PARTS TOTAL			16.8		100	

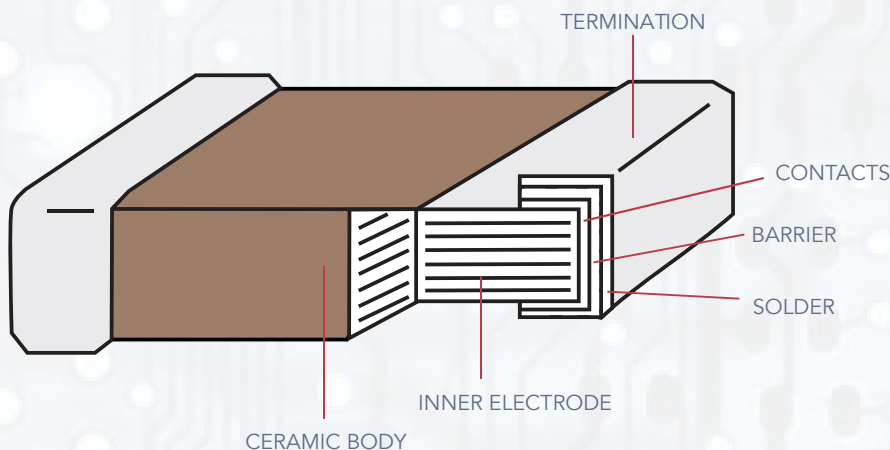
# MATERIAL DECLARATION

GMC21-X6S

## PRODUCT IDENTIFICATION

- PRODUCT NAME                      Capacitor (MLCC)
- SERIES                                GMC21
- SIZE                                    0805
- DIALECTRIC                         X6S
- WEIGHT                                19.8 (max)
- MANUFACTURE NAME            Cal-Chip Electronics Inc.
- ADDRESS                             59 Steamwhistle Drive Ivyland, PA 18974
- RESPONSIBLE PERSON NAME    Frank Salamone
- TELEPHONE                         215.942.8900

## GENERAL COMPOSITION



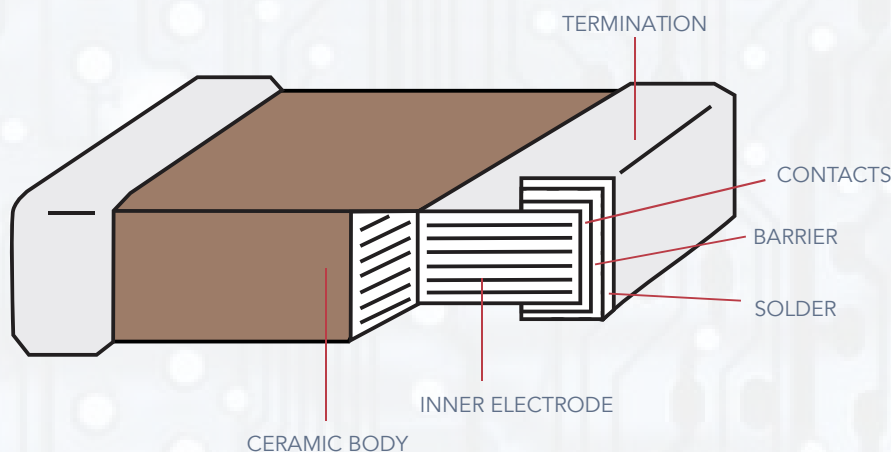
PART	MATERIAL		WEIGHT (mg)	% OF PART	% OF COMPONENT	CAS NO.
Body	Inner Electrode	Ni	5.67	29.79	29.09	7440-02-0
	Dielectric	BaTiO <sub>3</sub>	13.56	70.21	68.57	12047-27-7
SUBTOTAL			19.34	100	97.66	
Termination	Contact with Ceramic	Cu	0.327	70.75	1.65	7440-50-8
	Barrier Layer	Ni	0.017	3.67	0.09	7440-02-0
	Solder Platin	Sn	0.118	25.58	0.60	7440-31-5
SUBTOTAL			0.46	100	2.34	
ALL PARTS TOTAL			19.8		100	



## PRODUCT IDENTIFICATION

- PRODUCT NAME                      Capacitor (MLCC)
- SERIES                                GMC21
- SIZE                                    0805
- DIALECTRIC                         X5R
- WEIGHT                                19.8 (max)
- MANUFACTURE NAME                Cal-Chip Electronics Inc.
- ADDRESS                             59 Steamwhistle Drive Ivyland, PA 18974
- RESPONSIBLE PERSON NAME        Frank Salamone
- TELEPHONE                         215.942.8900

## GENERAL COMPOSITION



PART	MATERIAL		WEIGHT (mg)	% OF PART	% OF COMPONENT	CAS NO.
Body	Inner Electrode	Ni	5.67	29.79	29.09	7440-02-0
	Dielectric	BaTiO <sub>3</sub>	13.56	70.21	68.57	12047-27-7
SUBTOTAL			19.34	100	97.66	
Termination	Contact with Ceramic	Cu	0.327	70.75	1.65	7440-50-8
	Barrier Layer	Ni	0.017	3.67	0.09	7440-02-0
	Solder Platin	Sn	0.118	25.58	0.60	7440-31-5
SUBTOTAL			0.46	100	2.34	
ALL PARTS TOTAL			19.8		100	

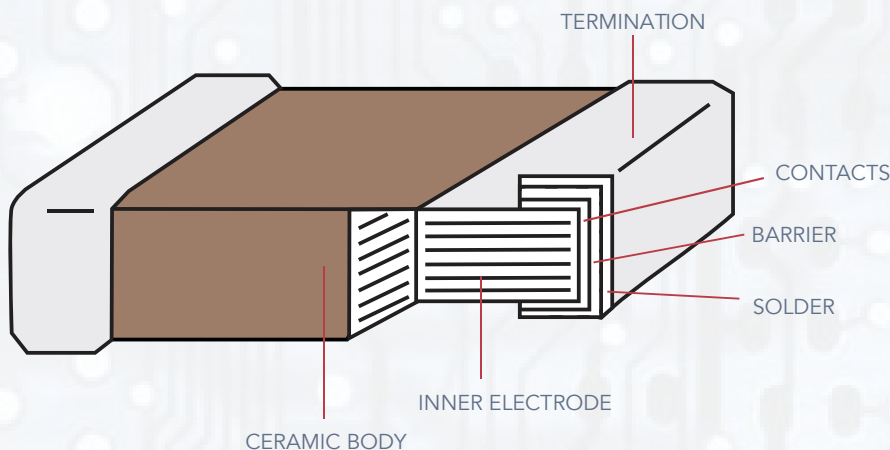
# MATERIAL DECLARATION

GMC21-Y5V

## PRODUCT IDENTIFICATION

- PRODUCT NAME                      Capacitor (MLCC)
- SERIES                                GMC21
- SIZE                                    0805
- DIALECTRIC                         Y5V
- WEIGHT                                10.9 (max)
- MANUFACTURE NAME            Cal-Chip Electronics Inc.
- ADDRESS                             59 Steamwhistle Drive Ivyland, PA 18974
- RESPONSIBLE PERSON NAME    Frank Salamone
- TELEPHONE                         215.942.8900

## GENERAL COMPOSITION



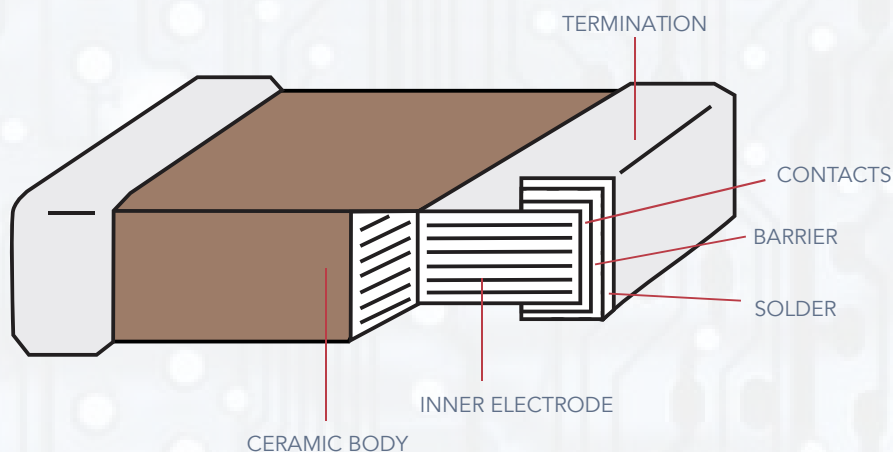
PART	MATERIAL		WEIGHT (mg)	% OF PART	% OF COMPONENT	CAS NO.
Body	Inner Electrode	Ni	0.36	3.42	3.30	7440-02-0
	Dielectric	BaTiO <sub>3</sub>	10.16	96.58	93.22	12047-27-7
SUBTOTAL			10.52	100	96.52	
Termination	Contact with Ceramic	Cu	0.261	68.80	2.39	7440-50-8
	Barrier Layer	Ni	0.017	4.48	0.16	7440-02-0
	Solder Platin	Sn	0.101	26.71	0.93	7440-31-5
SUBTOTAL			0.38	100	3.48	
ALL PARTS TOTAL			10.9		100	



## PRODUCT IDENTIFICATION

- PRODUCT NAME                      Capacitor (MLCC)
- SERIES                                GMC21
- SIZE                                  0805
- DIALECTRIC                         Z5U
- WEIGHT                               10.9 (max)
- MANUFACTURE NAME              Cal-Chip Electronics Inc.
- ADDRESS                             59 Steamwhistle Drive Ivyland, PA 18974
- RESPONSIBLE PERSON NAME      Frank Salamone
- TELEPHONE                         215.942.8900

## GENERAL COMPOSITION



PART	MATERIAL		WEIGHT (mg)	% OF PART	% OF COMPONENT	CAS NO.
Body	Inner Electrode	Ni	0.36	3.42	3.30	7440-02-0
	Dielectric	BaTiO <sub>3</sub>	10.16	96.58	93.22	12047-27-7
SUBTOTAL			10.52	100	96.52	
Termination	Contact with Ceramic	Cu	0.261	68.80	2.39	7440-50-8
	Barrier Layer	Ni	0.017	4.48	0.16	7440-02-0
	Solder Platin	Sn	0.101	26.71	0.93	7440-31-5
SUBTOTAL			0.38	100	3.48	
ALL PARTS TOTAL			10.9		100	