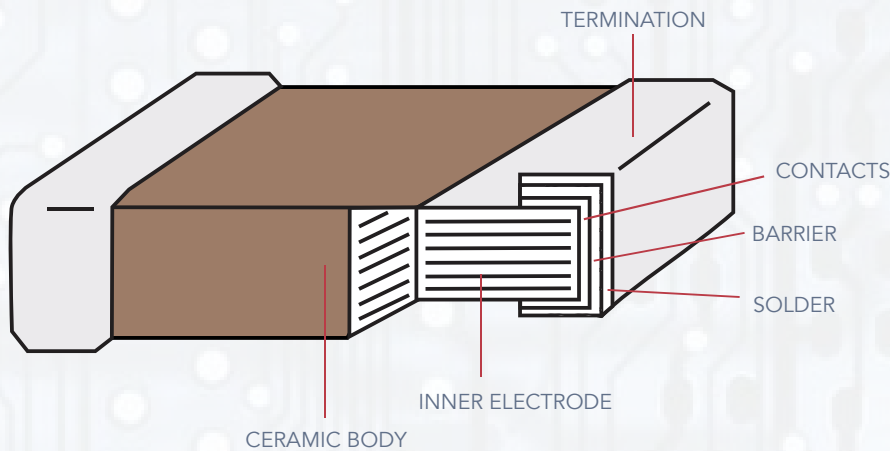


## PRODUCTION IDENTIFICATION

- PRODUCT NAME	Capacitor (MLCC)
- TYPE	GMC21
- SIZE	C0G
- SERIES	0805
- 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

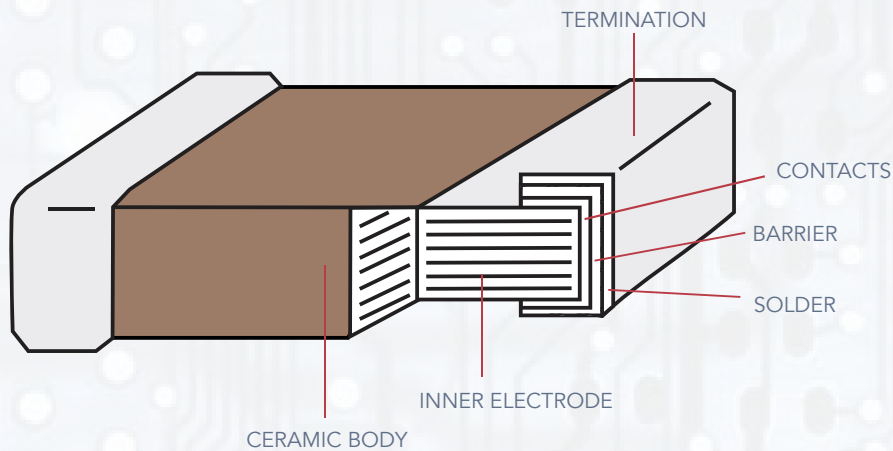


PART	MATERIAL		WEIGHT (mg)	% OF PART	% OF COMPONENT	CAS NO.
Body	Inner electrode	Ni	0.14	2.15	2.03	7440-02-0
	Dielectric	Calcium Magnesium Titanate	6.56	97.85	92.40	12032-30-3 7439-95-4 12049-50-2
SUBTOTAL			6.70	100.00	94.42	
Termination	Contact with Ceramic	Cu	0.261	65.829	3.674	7440-50-8
	Barrier Layer	Ni	0.017	4.290	0.239	7440-02-0
	Solder Plating	Sn	0.118	29.881	1.668	7440-31-5
SUBTOTAL			0.40	100.00	5.58	
ALL PARTS TOTAL			7.1		100	

## PRODUCTION IDENTIFICATION

- PRODUCT NAME                      Capacitor (MLCC)
- TYPE                                    GMC21
- SIZE                                    X7R
- SERIES                                0805
- 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



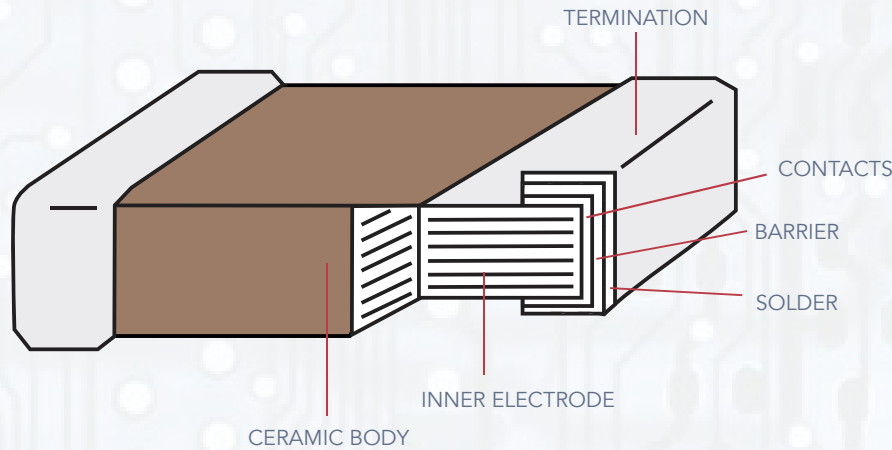
PART	MATERIAL		WEIGHT (mg)	% OF PART	% OF COMPONENT	CAS NO.
Body	Inner Electrode	Ni	0.67	4.06	3.96	7440-02-0
	Dielectric	BaTiO <sub>3</sub>	15.75	95.94	93.78	12047-27-7
SUBTOTAL			16.42	100	97.74	
Termination	Contact with Ceramic	Cu	0.261	68.81	1.55	7440-50-8
	Barrier Layer	Ni	0.017	4.48	0.10	7440-02-0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



## PRODUCTION IDENTIFICATION

- PRODUCT NAME                   Capacitor (MLCC)
- TYPE                               GMC21
- SIZE                               X5R
- SERIES                            0805
- 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	5.76	29.79	29.09	7440-02-0
	Dielectric	BaTiO <sub>3</sub>	13.58	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 Plating	Sn	0.118	25.58	0.60	7440-31-5
SUBTOTAL			0.46	100	2.34	
ALL PARTS TOTAL			19.8		100	

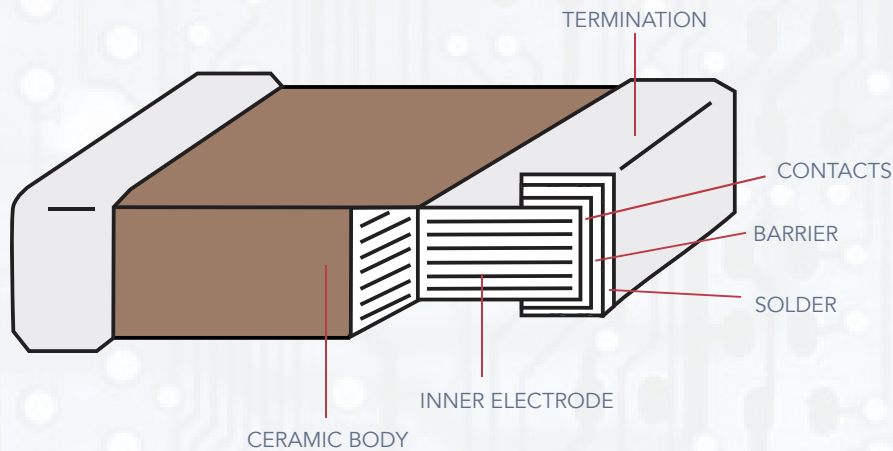
Several additives are included in ceramic body. Any environmentally prohibited material is not included in additives. It is difficult to reveal the precise chemical composition and content of each additive due to each MLCC maker's know-how.

Date: March 15th, 2005

## PRODUCTION IDENTIFICATION

- PRODUCT NAME                      Capacitor (MLCC)
- TYPE                                    GMC21
- SIZE                                    Y5V
- SERIES                                0805
- 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



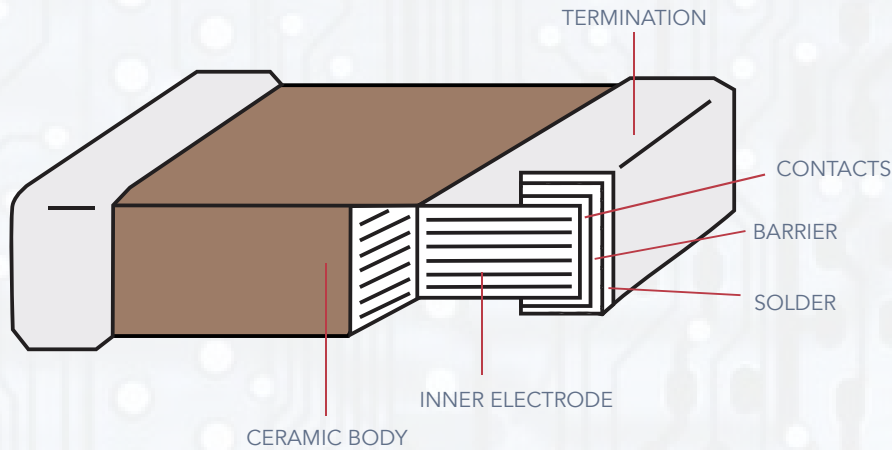
PART	MATERIAL		WEIGHT (mg)	% OF PART	% OF COMPONENT	CAS NO.
Body	Inner Electrode	Ni	0.36	3.42	3.30	7440-02-0
	Dielectric	BaTiO <sub>3</sub>	10.16	96.58	93.22	12047-27-7
SUBTOTAL			10.52	100	96.52	
Termination	Contact with Ceramic	Cu	0.261	68.80	2.39	7440-50-8
	Barrier Layer	Ni	0.017	4.48	0.16	7440-02-0
	Solder Plating	Sn	0.101	26.72	0.93	7440-31-5
SUBTOTAL			0.38	100	3.48	
ALL PARTS TOTAL			10.9		100	



## PRODUCTION IDENTIFICATION

- PRODUCT NAME                   Capacitor (MLCC)
- TYPE                               GMC21
- SIZE                               Z5U
- SERIES                           0805
- 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 Plating	Sn	0.101	26.72	0.93	7440-31-5
SUBTOTAL			0.38	100	3.48	
ALL PARTS TOTAL			10.9		100	