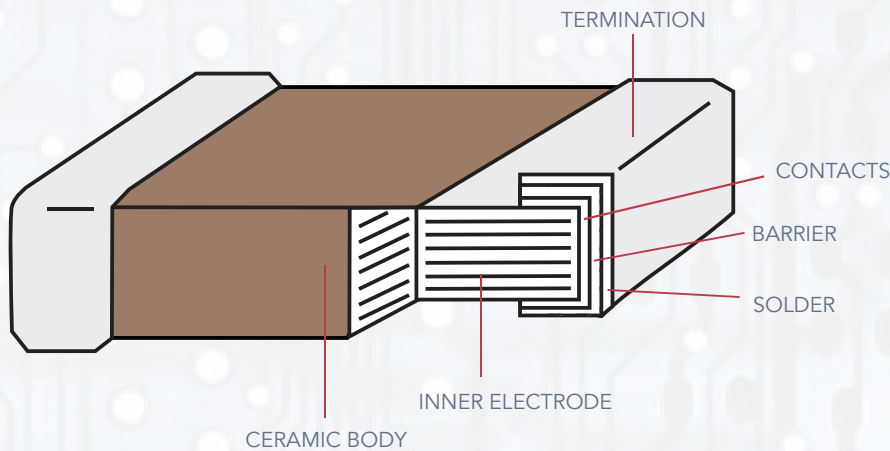


## PRODUCTION IDENTIFICATION

- PRODUCT NAME	Capacitor (MLCC)
- TYPE	GMC02
- SIZE	C0G
- SERIES	0201
- WEIGHT	0.223 (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

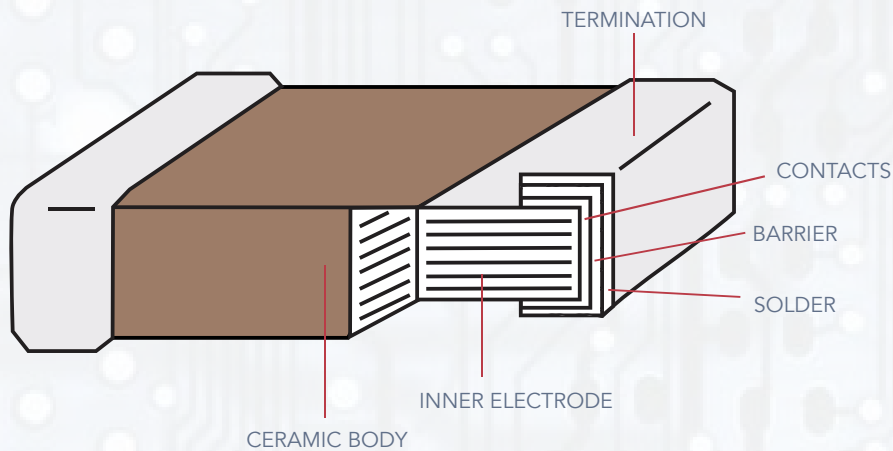


PART	MATERIAL		WEIGHT (mg)	% OF PART	% OF COMPONENT	CAS NO.
Body	Inner electrode	Ni	0.04	21.51	17.88	7440-02-0
	Dielectric	CaTiO <sub>3</sub>	0.15	78.49	65.23	12032-30-3 7439-95-4 12049-50-2
SUBTOTAL			0.19	100.00	83.11	
Termination	Contact with Ceramic	Cu	0.006	16.259	2.746	7440-50-8
	Barrier Layer	Ni	0.008	20.964	3.541	7440-02-0
	Solder Plating	Sn	0.024	62.777	10.603	7440-31-5
SUBTOTAL			0.004	100.00	16.89	
ALL PARTS TOTAL			0.223		100	

## PRODUCTION IDENTIFICATION

- PRODUCT NAME                   Capacitor (MLCC)  
 - TYPE                               GMC02  
 - SIZE                               X7R  
 - SERIES                            0201  
 - WEIGHT                           0.25           (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



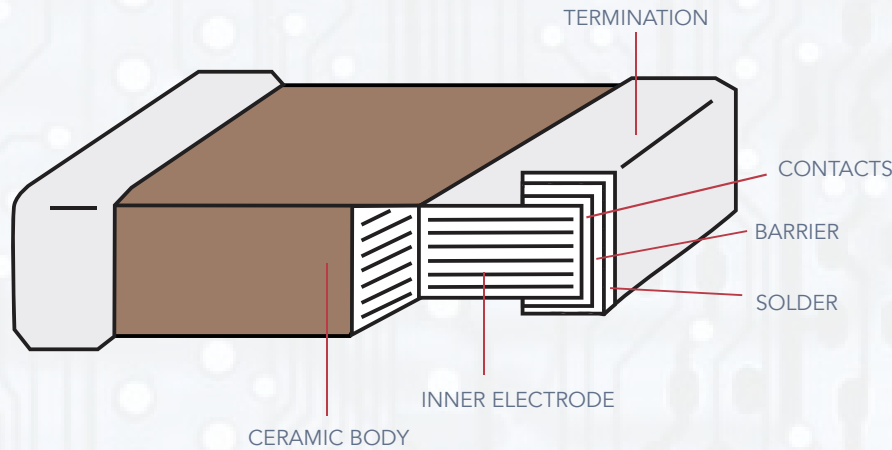
PART	MATERIAL		WEIGHT (mg)	% OF PART	% OF COMPONENT	CAS NO.
Body	Inner Electrode	Ni	0.05	24.53	20.8	7440-02-0
	Dielectric	BaTiO <sub>3</sub>	0.16	75.47	64.00	12047-27-7
	SUBTOTAL		0.21	100	84.80	
Termination	Contact with Ceramic	Cu	0.006	15.79	2.40	7440-50-8
	Barrier Layer	Ni	0.008	21.05	3.20	7440-02-0
	Solder Plating	Sn	0.024	63.16	9.60	7440-31-5
	SUBTOTAL		0.04		15.20	
	ALL PARTS TOTAL		0.25		100	



## PRODUCTION IDENTIFICATION

- PRODUCT NAME	Capacitor (MLCC)
- TYPE	GMC02
- SIZE	X5R
- SERIES	0201
- WEIGHT	0.90 (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	0.01	1.33	1.25	7440-02-0
	Dielectric	BaTiO <sub>3</sub>	0.83	98.67	92.54	12047-27-7
SUBTOTAL			0.84	100	93.79	
Termination	Contact with Ceramic	Cu	0.025	44.24	2.75	7440-50-8
	Barrier Layer	Ni	0.013	22.34	1.39	7440-02-0
	Solder Plating	Sn	0.019	33.42	2.08	7440-31-5
SUBTOTAL			0.06	100	6.22	
ALL PARTS TOTAL			0.90		100	

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

Date : March 15th, 2005