

RoHS CAPACITOR MATERIAL DECLARATION SHEET: Disc, SLC, and MLC

Material	Type	Composition	CAS Number
Dielectric	X5R X7R	Barium Titanate	12047-27-7
		Calcium Zirconate	12013-47-7
	Niobium Oxide	1313-96-8	
	Lanthanum Oxide	1312-81-8	
Dielectric	X5U	Barium Titanate	12047-27-7
		Calcium Zirconate	12013-477
		Niobium Oxide	1313-96-8
		Lead Titanate *	12060-00-3
Lanthanum Oxide	1312-81-8		
Dielectric	Z5U	Barium Titanate	12047-27-7
		Calcium Zirconate	12013-47-7
		Niobium Oxide	1313-96-8
Dielectric	CR03	Barium Titanate	12047-27-7
	CR07	Strontium Titanate	12060-59-2
	CR22	Bismuth Oxide	1304-76-3
Dielectric	CR01	Strontium Titanate	12060-59-2
	CR02	Lead Titanate *	12060-00-3
Dielectric	NPOK20	Barium Titanate	12047-27-7
		Zirconium Oxide	1314-23-4
		Niobium Oxide	1313-96-8
		Zinc Oxide	1314-13-2
Dielectric	NPOK85	Barium Titanate	12047-27-7
		Neodymium Oxide	1313-97-9
		Lead Titanate *	12060-00-3
		Bismuth Oxide	1304-76-3

Material	Type	Composition	CAS Number
Disc & MLC Termination	Ag	Bismuth Oxide	1304-76-3
		Silver	7440-22-4
Interlayer Electrodes	Ag/Pd	Silver	7440-22-4
		Palladium	7440-05-3
Solder	SAC 305	Copper 0.5 wt%	7440-30-5
		Tin 96.5 wt%	7440-50-8
		Silver 3.0 wt%	7440-22-4
Wire Leads	CCFe	Copper (Clad)	7440-50-8
		Iron (Base)	7440-89-6
		Nickel (Flash)	7440-02-0
		Tin (Finish)	7440-30-5
Wire Leads	OFHC	Copper (Base)	7440-50-8
		Tin (Finish)	7440-30-5
		Lead (Finish)	7439-92-1
Coating	Epoxy	1,2,4-Benzentricarboxylic-1,2-Anhydride	552-30-7
		Antimony Oxide	1309-64-4
		Silica	60676-86-0
Epoxy Marking Ink	4481BLK	Carbon Black	1333-86-4
		Propylene Carbonate	108-32-7
		Silica	7631-86-9

* Per RoHS 2 and Commission Delegate Directive (EU) 2015/863 Article 4(1), exemption 7(c)-II, Lead in dielectric ceramic in capacitors for a rated voltage of 125V AC or 250V DC or higher