

Technical Annexure for Space Qualified SMD Ceramic Capacitors

Sr. no.	Part Number	Package Size	Capacitance Value	Tolerance (± %)	Voltage Rating (V)	Max. dimensions L x W x T (mm)	Vendor's Offer	
							Part Number offered	Compliance / Remarks
1	300904103334JC or equivalent	0805	330 nF	5	50	2.26 x 1.52 x 1.52		
2	300904103474JC or equivalent	0805	470 nF	5	50	2.26 x 1.52 x 1.52		
3	300904103104JE or equivalent	0805	0.1 µF	5	100	2.26 x 1.52 x 1.52		
4	300904104154JE or equivalent	1206	150 nF	5	100	3.45 x 1.85 x 1.8		
5	300904104394JE or equivalent	1206	390 nF	5	100	3.45 x 1.85 x 1.8		
6	300904104684JC or equivalent	1206	680 nF	5	50	3.45 x 1.85 x 1.8		
7	300904104105JC or equivalent	1206	1 µF	5	50	3.45 x 1.85 x 1.8		
8	300904105474JE or equivalent	1210	470 nF	5	100	3.45 x 2.74 x 2.8		
9	300904106225JE or equivalent	1812	2.2 µF	5	100	4.8 x 3.5 x 2.8		
10	300904107475JE or equivalent	2220	4.7 µF	5	100	6.1 x 5.41 x 2.8		

Note:

1. Vendor shall provide CoC along with the items.
2. The quotation shall be considered only if the name of manufacturer is clearly mentioned and the datasheet from the same manufacturer is enclosed with the technical-offer.
3. Vendor must quote in the quantity slabs given.
4. Ordering quantity may be increased or decreased from the nominal quantity.
5. Vendor must provide point-by-point compliance for all the above points and for all points given in the R & QA requirements (next page).

QA REQUIREMENTS FOR BME CERAMIC CAPACITORS		
Sr. No.	SAC requirement description	Compliance Remark(s)
1	The capacitors, to be supplied, shall fully comply with any one of the quality requirements described in 1a/1b as below:	
1a	Qualified to and as per the latest ESCC 3009 applicable specification with in process inspection, chart F2 and F3 testing.	
1b	Qualified to and as per the latest MIL-PRF-32535 applicable specification with high reliability 'T' level including Group A & B.	
2	Parts shall be listed on QPL of applicable MIL/ESCC specification.	
3	The deliverable capacitors shall have a Single Lot Date Code (SLDC) (preferable) and not older than two years (mandatory) from the date of shipment to SAC.	
4.	PIN marking on component/component bag shall be as per applicable ESCC/MIL standard with logo.	
5	Capacitors shall be clean, dry, and packaged as per the part number designation, in an electrostatic discharge (ESD) safe <u>waffle package</u> , in a secure manner that will offer adequate protection against corrosion, deterioration, and physical damage. <u>Tape & reel packaging shall not be acceptable.</u>	
6	The following details shall be supplied along with proposal.	
6a	Name of the Original Part Manufacturer.	
6b	The vendor(s) authorized by original part manufacturer to source and sell parts in INDIA shall only be considered. Latest copy of authorization letter and point by point compliance endorsed by the Original Part Manufacturer in case quote is not from OEM. OR <u>If quote is from Authorized Representative of HI-REL Parts Procurement Agency (HRPPA);</u> Copy of latest authorization letter and point by point compliance endorsed by the HRPPA.	
	<u>If supplier is HI-REL Parts Procurement Agency (HRPPA) OR Representative of HRPPA; in addition to all the quality requirement of this Indent compliance with the supporting documents/certificates for the following shall be provided along with the quote-</u>	
6c	The vendor should have more than 5 years of experience as HRPPA. Details regarding the same shall be supplied.	
	Details of EEE parts supplied to other customers with name of space programs supported and Space agencies / Satellite payload manufacturers.	
	Supplied parts shall meet Manufacturer recommended storage & cleanliness condition.	

	Outline of the Vendor's operating procedure, for compliance to quality requirements of this document; including details of mechanism for traceability up to Original Parts Manufacturer.	
	Details of Quality documents that will be supplied along with deliverables	
	For off-the-shelf parts following shall be provided along with quote- <ul style="list-style-type: none"> • Date-code of supplied parts • Storage and inspection criteria to be supplied whenever applicable • Technical and Quality Procurement specifications 	
	Acceptability of such off-the-shelf parts will be at SAC's discretion	
7	The followings shall be supplied along with the deliverable components.	
7a	Certificate of Conformance (CoC) from the original part manufacturer.	
7b	Certificate of Conformance (CoC) from the vendor/supplier.	
7c	Soft copy of test data summary as per applicable.MIL/ESCC standard, if ordered.	
7d	A copy of guideline/application note pertaining to the handling, storage, mounting, soldering/fabrication of the offered capacitors if any.	
8	Important notes:	
8a	Point by point compliance with supporting documents as described above in para 1 to 7 shall be submitted along with the technical quote. Additionally, if supplier is HRPPA/authorized representative of HRPPA, all the details as per para 6c shall be submitted along with quote with the supporting technical documents/certificates. Failing so the offer is liable to be rejected.	