

PRESIDIO SCREENING LEVELS

COMMERCIAL • HR • CR

SCREENING LEVELS		Commercial*	Voltage Conditioning Per Group A of MIL-PRF-55681	DPA & Voltage Conditioning Per Group A of MIL-PRF-55681	
PREFIX:		(Blank)	HR	CR	
SCREENING LEVEL CODES:		(Blank)	(Blank)	(Blank)	
BASIC TESTING	Capacitance — All parts are tested at 25°C and 1VACRMS in accordance with Method 305 of MIL-STD-202.	100%	100%	100%	
	Dissipation Factor	100%	100%	100%	
	Dielectric Withstanding Voltage (DWV) — All parts are tested at 2.5X rated voltage up to 200V in accordance with Method 301 of MIL-STD-202.	100%	100%	100%	
	Insulation Resistance (IR at 25°C) — All parts are tested at 25°C and Rated Voltage in accordance with Method 302 of MILSTD-202. The minimum IR required is 100,000 Megohms or 1,000 Megohm-Microfarads.	100%	100%	100%	
	Insulation Resistance (IR @ 125°C) — All parts are tested at 125°C and Rated Voltage in accordance with Method 302 of MIL-STD-202. The minimum IR required is 10,000 Megohms or 100 Megohm-Microfarads.	NO	NO	NO	
	Solderability (SnPn plated in accordance with Method 208 of MIL-STD-202). Wirebonding Test (Gold in accordance with Method 2011 of Mil-SDT-883).	YES	YES	YES	
ENVIRONMENTAL TESTING AND RELIABILITY SCREENING	Thermal Shock (20 Cycles) — All parts are temperature cycled for 20 cycles to MIL-STD-202 Method 107, Condition A, except that max temperature is 125°C.	NO	NO	NO	
	Voltage Conditioning (100%) — All parts receive a voltage conditioning at 2X rated voltage up to 200V and 125°C for a minimum of 168 hours and a maximum of 264 hours. Voltage Conditioning may be terminated at any time between 168 and 264 hour time interval when failures are less than .1% or 1 piece during the last 48 hours of the test. Method follows MIL-PRF-123. Resistors, instead of fuses are acceptable.	NO	8 Hrs. Min.	100 Hrs.	
	Percent Defective Allowed (PDA) — The cumulative PDA after Voltage Conditioning is 5%. Pieces rejected as out of tolerance for capacitance or visual screening will be removed from the lot but not counted in the PDA calculation.	NO	8%	8%	
	Destructive Physical Analysis (DPA) — A representative sample is pulled from each lot and examined per EIA RS469 and to verify adherence to Presidio's design criteria. Sample size is per MIL-PRF-123.	NO	NO	YES	
	Voltage Temperature Limit — VTC (when applicable)	NO	NO	NO	
	Visual Inspection — A 100% inspection is performed IAW MIL-PRF-123 Appendix B.	Samples	Samples	Samples	
	Mechanical Inspection (Dimensions) — Level 1 AQL 1% in accordance with MIL-PRF-123.	YES	YES	YES	
	GROUP A	Thermal Shock (100 Cycles) — A sample is pulled from each lot. 100 Thermal Shock cycles are performed before Life Test.	NO	NO	NO
		Life-Test — is performed for 1000 hours at 2X rated voltage up to 200V and 125°C. Sample size and method follows MIL-PRF-123.	NO	NO	NO
		Ultrasonic Examination — This screening sample will be performed on lots to assure the highest quality microstructure. 100% ultrasonic scanning is not required for each lot, and must be specified on the customer order. Separate charge applies for 100% ultrasonic scanning.	NO	NO	NO
		Humidity Steady State Low Voltage (85°C/85% humidity) — A sample of 12 pieces is pulled from each lot and tested per Method 103 of MIL-STD 202.	NO	NO	NO
		Moisture Resistance — In accordance with Method 106 of MIL-STD-202.	NO	NO	NO
	GROUP B	Terminal Strength — In accordance with Method 211 of MIL-STD-202.	NO	NO	NO
		Solderability — In accordance with Method 208 of MIL-STD-202.	NO	NO	NO
		Resistance to Soldering Heat — In accordance with Method 210 of MIL-STD-202.	NO	NO	NO
GROUP C	RECOMMENDED FOR SPACE FLIGHTS	NO	NO	NO	
	LEAD-TIME ARO (Weeks)	3 to 13	3 to 13	3 to 13	

Call Presidio if you would like more information on our screening options.

Presidio's UP capacitors can be upscreened to SPACE LEVEL testing. Consult the factory for details. Some voltage derating may apply.

PART NUMBER EXAMPLE (How to Order)

SR	1010	UP	101	J	6	T	1	C	(A)	#M123	A
Prefix *	Size	Dielectric (See Page 3)	Capacitance	Capacitance Tolerance	Voltage	Termination	Packaging	RoHS Compliant	Design-In Code (See Page 19)	Screening Level (See Above)	Ultrasonic A = 100% B = None