

SMT Power Inductor Specifications

	Item	Specification	Test Method/Condition
Environmental	Static Humidity	After exposure part remains within specified electrical parameters for L,Q and DCR	Precondition at 25° C for 60 minutes. Expose parts to an environment of +40° C with 90 to 95% R.H. for 240 hours.
	Storage Life	After exposure part remains within specified electrical parameters for L,Q and DCR	Subject parts to an environment of 85° C 85% R.H. for 168 hours. After exposure allow parts to dry for 4 hours before measurements are taken.
	Temperature Cycle	After exposure part remains within specified electrical parameters for L,Q and DCR	10 cycles of the following: 30 minutes at +85° C 30 minutes at -40° C Allow 20 minutes transition between extremes.
	Temperature Shock	After exposure part remains within specified electrical parameters for L,Q and DCR	10 cycles (Air to Air) 1 cycle shall consist of: 30 minutes exposure to -55° C 30 minutes exposure to 125° C 15 seconds maximum transition between temperatures.
General	Storage Temperature Range	-40 to +85° C	
	Operating Temperature Range	-40 to +85° C	
	Flammability	IEC 695-2-2	Withstands needle-flame test (DO5022 Series, consult factory)
Other	Vibration	After exposure part remains within specified electrical parameters for L,Q and DCR	1 cycle of 30 minutes of the following: 5-7 Hz constant displacement of .75 inch, 5 minutes 7-30 Hz constant acceleration of 1.5 Gs, 10 minutes 30-50 Hz constant displacement of .033 inch, 5 minutes 50-500 Hz constant acceleration of 1.2 Gs, 10 minutes
	Mechanical Shock	After exposure part remains within specified electrical parameters for L,Q and DCR	DT1608/3316 — 8700 Gs per axis, 2 directions DS1608 DO1608/3316 — 2000 Gs per axis, 2 directions DO3308 DS3316 LPO2506 — 1500 Gs per axis, 2 directions DO3340 — 500 Gs per axis, 2 directions DO5022 DS5022
	Solderability	Wetting shall cover 90% minimum of each termination	Dip pads in RMA flux, 63/37 solder (sn/pb) at 232° C for 5 ±2 seconds.
	Component Adhesion (Push Test)	Component must withstand 6 lb. push force minimum without delaminating from mounting surface.	Apply and measure force with a digital force gauge set.
	Resistance to Solvent		Withstands 6 minutes of alcohol (except LPT1606 and LPO2506).
Chemical Requirements	Ionic Contamination	Conductivity ≤11 μS/cm pH 5.5 to 9 Chlorides ≤65 ppm Sodium ≤20 ppm Potassium ≤10 ppm	



Specifications subject to change without notice. Document 164 Revised 5/24/99

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