

Surface Mount Inductors

TESTING: MIL-PRF-83446, MIL-PRF-15305, and MIL-STD-202 are used as guidelines for type of test, method, and requirement. These specifications are employed as reference guidelines and may be adjusted, based on design, application, or market need. Consult the Sales Department for assistance concerning this important issue. All testing and methods for characterizing the inductive components are as performed by API Delevan. Further information is available for the details of specific tests. Copies of Government specifications are not available from API Delevan. For additional information contact your local Representative, or the API Delevan Sales Department.

TEST FIXTURES: Available through special order. The factory recommends test equipment correlation sampling when low inductance ($\leq 0.10\mu\text{H}$) and tight tolerance ($\leq 2\%$) values are required.



PERFORMANCE TESTING

Test	Ref. Method	Requirement
Thermal Shock	MIL-STD-202, Method 107, Condition A2	Parts will be able to withstand 50 cycles of thermal shock with no evidence of failure.
Dielectric Withstanding Voltage	MIL-STD-202, Method 301	500 Vrms for 40 seconds. No evidence of breakdown
Barometric Pressure	MIL-STD-202, Method 105, Condition C	No evidence of breakdown. Test voltage: 200 Vrms.
Insulation Resistance	MIL-STD-202, Method 302, Condition A	1000 megohms minimum when tested from terminations to the component body.
Life Test	MIL-STD-202, Method 108	Test condition F
Solderability	MIL-STD-202, Method 208	95% coverage after immersing in type RMA flux, solder dip for five seconds @ $245^{\circ}\text{C} \pm 5^{\circ}\text{C}$.
Temperature Rise Characteristics	MIL-PRF-83446 para. 3.15	No degradation to series electrical parameters
Overload	MIL-PRF-83446 para. 3.16	One and one-half times rated current for 5 minutes
Resistance to Solder Heat	MIL-STD-202, Method 210	Test condition B
Moisture Resistance	MIL-STD-202, Method 106	No load applied during test
Terminal Strength	MIL-STD-883, Method 2011	One kilogram force
Solvent Resistance	MIL-STD-202, Method 215	No damage after exposure to processing chemicals.

Technical Notes

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MARKING: Standard marking is either laser processing or imprinting. Each inductor will have manufacturer identifier, the inductance value (either by actual value or series dash number designation), and the date code of manufacture for traceability. See the catalog page for examples of the specific series printing. Optional marking is available on request. Micro-i's, Multilayer, Ferrite Beads, Variables, and Air-Coils are not marked due to construction or size limitations. Consult the Sales Department for your specific requirements.

PCB MOUNTING: All components are capable of being mounted by any standard means of assembly. Details can be obtained by consulting the API Delevan Engineering Department.

PACKAGING: Standard is bulk bagged or on "cut tape" for quantities under 500 pieces. Full reel quantities will be supplied on Tape & Reel per latest revision of EIA-RS-481. Series 3483 and S3483 conform to EIA #RC-1009B.

Tape & Reel Specifications for Catalog Parts

SERIES NUMBER	— MAXIMUM QUANTITY —		EMBOSSED CARRIER WIDTH
	PER 7" DIAMETER REEL	PER 13" DIAMETER REEL	
MICRO i® Devices			
100	Not Avail.	Not Avail.	---
103, 105, 108, 3090	2000	8000	8mm
3094, 4379	650	2500	12mm

Tape & Reel Specifications for Catalog Parts

SERIES NUMBER	— MAXIMUM QUANTITY —		EMBOSSED CARRIER WIDTH
	PER 7" DIAMETER REEL	PER 13" DIAMETER REEL	
SURFACE MOUNT Devices			
0402	4000	Not Avail.	8mm
1008, HF1008, S1008, 4302	2000	7000	8mm
WW1008	2000	Not Avail.	8mm
1210, S1210, 4232	2000	7000	8mm
1330, MIL1330, P1330	500	2200	16mm
1331, MIL1331	500	2200	16mm
0603, C1608	4000	Not Avail.	8mm
0805	2000	Not Avail.	8mm
1812, S1812, MIL1812, P1812, MILS1812	650	2500	12mm
C2012	3000	Not Avail.	8mm
2510, MIL2510, 2512	750	2700	12mm
3223	Not Avail.	1000	24mm
3483, S3483	Not Avail.	1000	16mm
4221-1 & -3	500	2500	12mm
4221-2 & -4	500	2500	16mm
4426-1 to -5	650	2500	12mm
4426-6 to -10	400	1400	16mm
4448, CM6460, CM6560	Not Avail.	350	24mm
4494, 4501, FW1405	Not Avail.	600	24mm
4922, S4924, 5022, 5526	Not Avail.	800	24mm
5142	Not Avail.	500	24mm
8532	Not Avail.	480	44mm
CM6149	Not Avail.	800	16mm
CM6350, CM6594	Not Avail.	600	24mm
EMI0805, EMI1206, EMI1210	2000	5000	8mm
EMI1806-XXX	2000	5000	12mm
EMI1812-XXX	1000	2500	12mm
PD43	Not Avail.	1500	12mm
PD54, PD73	Not Avail.	1000	16mm
PD75	Not Avail.	500	16mm
PD104	Not Avail.	1000	24mm
PD105	Not Avail.	500	24mm
SDS680	Not Avail.	2000	16mm
SDS850	Not Avail.	1000	16mm
SDS130	Not Avail.	1000	24mm
SMB 2.5	Not Avail.	700	24mm
SPD62	Not Avail.	1500	16mm
SPD73, SPD74	Not Avail.	1000	16mm
SPD125, SPD127	Not Avail.	500	24mm