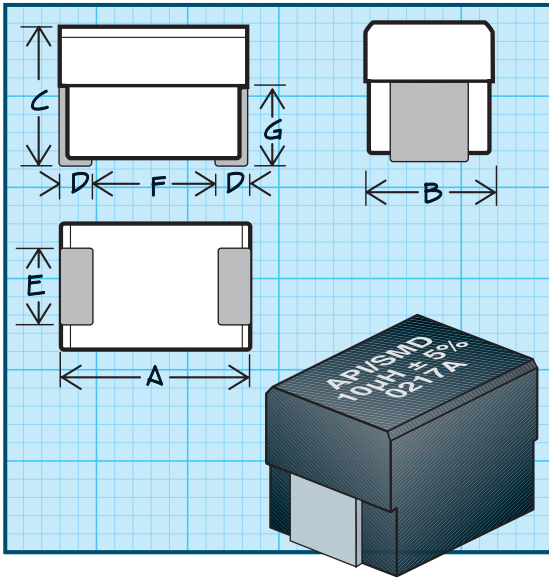


Series

MIL1812R
MIL1812

Unshielded Surface Mount Inductors



Military QPL Approvals

M83446/39

* Suffix F: Tin/Lead Termination

* Suffix P: ROHS Compliant

Physical Parameters

	Inches	Millimeters
A	0.166 to 0.190	4.22 to 4.83
B	0.118 to 0.134	3.00 to 3.40
C	0.118 to 0.134	3.00 to 3.40
D	0.015 Min.	0.38 Min.
E	0.054 to 0.078	1.37 to 1.98
F	0.118 (Ref. only)	3.00 (Ref. only)
G	0.066 (Ref. only)	1.68 (Ref. only)

Dimensions "A" and "C" are over terminals

Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C

Iron and Ferrite: 0.278 Watts

Phenolic: 0.210 Watts

****†Note** Self Resonant Frequency (SRF) values are calculated and for reference only.

Packaging Tape & reel (12 mm): 7" reel, 650 pieces max.; 13"-reel, 2500 pieces max.

*Termination Finish Options (Part & Callout)

MIL1812-101K = M83446/39-13F (Tin/Lead)

MIL1812R-101K = M83446/39-13P (Lead free)

****Complete part # must include series # PLUS the dash #**

For further surface finish information,
refer to TECHNICAL section of this catalog.

Made In the U.S.A. Patent Protected

DASH NUMBER**

MIL DASH*

INDUCTANCE (µH)

TOLERANCE

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)**†

DC RESISTANCE
MAXIMUM (OHMS)CURRENT RATING
MAX. (mA)

M83446/39 PHENOLIC CORE

-100M	-01*	0.010	±20%	40	50	1000**†	0.10	1230
-120M	-02*	0.012	±20%	40	50	1000**†	0.10	1230
-150M	-03*	0.015	±20%	40	50	1000**†	0.10	1230
-180M	-04*	0.018	±20%	40	50	1000**†	0.10	1230
-220M	-05*	0.022	±20%	40	50	1000**†	0.10	1230
-270M	-06*	0.027	±20%	40	50	1000**†	0.15	1000
-330M	-07*	0.033	±20%	40	50	1000**†	0.15	1000
-390M	-08*	0.039	±20%	30	50	1000**†	0.20	870
-470M	-09*	0.047	±20%	30	50	1000**†	0.20	870
-560M	-10*	0.056	±20%	30	50	850**†	0.25	770
-680M	-11*	0.068	±20%	25	50	750**†	0.25	770
-820M	-12*	0.082	±20%	25	50	750**†	0.25	700

M83446/39 IRON CORE

-101K	-13*	0.10	±10%	30	25	650**†	0.30	818
-121K	-14*	0.12	±10%	30	25	600**†	0.30	818
-151K	-15*	0.15	±10%	30	25	500**†	0.30	818
-181K	-16*	0.18	±10%	30	25	400**†	0.35	757
-221K	-17*	0.22	±10%	30	25	350**†	0.40	708
-271K	-18*	0.27	±10%	30	25	300**†	0.45	668
-331K	-19*	0.33	±10%	30	25	250	0.55	604
-391K	-20*	0.39	±10%	30	25	220	0.70	535
-471K	-21*	0.47	±10%	30	25	190	0.80	501
-561K	-22*	0.56	±10%	30	25	170	1.20	409
-681K	-23*	0.68	±10%	30	25	150	1.40	379
-821K	-24*	0.82	±10%	30	25	140	1.60	354

M83446/39 FERRITE CORE

-102J	-25*	1.0	±5%	50	7.9	100	0.50	634
-122J	-26*	1.2	±5%	50	7.9	80	0.55	604
-152J	-27*	1.5	±5%	50	7.9	70	0.60	578
-182J	-28*	1.8	±5%	50	7.9	60	0.65	556
-222J	-29*	2.2	±5%	50	7.9	55	0.70	535
-272J	-30*	2.7	±5%	50	7.9	50	0.75	517
-332J	-31*	3.3	±5%	50	7.9	45	0.80	501
-392J	-32*	3.9	±5%	50	7.9	40	0.90	472
-472J	-33*	4.7	±5%	50	7.9	35	1.00	448
-562J	-34*	5.6	±5%	50	7.9	33	1.10	427
-682J	-35*	6.8	±5%	50	7.9	27	1.20	409
-822J	-36*	8.2	±5%	50	7.9	25	1.40	375
-103J	-37*	10	±5%	50	7.9	20	1.60	354
-123J	-38*	12	±5%	50	2.5	18	2.00	317
-153J	-39*	15	±5%	50	2.5	17	2.50	283
-183J	-40*	18	±5%	50	2.5	15	2.80	268
-223J	-41*	22	±5%	50	2.5	13	3.20	250
-273J	-42*	27	±5%	50	2.5	12	3.60	236
-333J	-43*	33	±5%	50	2.5	11	4.00	224
-393J	-44*	39	±5%	50	2.5	10	4.50	211
-473J	-45*	47	±5%	50	2.5	10	5.00	200
-563J	-46*	56	±5%	50	2.5	9	5.50	191
-683J	-47*	68	±5%	50	2.5	9	6.00	183
-823J	-48*	82	±5%	50	2.5	8	7.00	169
-104J	-49*	100	±5%	50	2.5	8	8.00	158
-124J	-50*	120	±5%	40	0.79	6	8.0	158
-154J	-51*	150	±5%	40	0.79	6	9.0	149
-184J	-52*	180	±5%	40	0.79	5	9.5	145
-224J	-53*	220	±5%	40	0.79	4	10.0	142
-274J	-54*	270	±5%	40	0.79	4	12.0	129
-334J	-55*	330	±5%	40	0.79	3.5	14.0	120
-394J	-56*	390	±5%	40	0.79	3.0	20.0	100
-474J	-57*	470	±5%	40	0.79	3.0	26.0	88
-564J	-58*	560	±5%	30	0.79	3.0	30.0	82
-684J	-59*	680	±5%	30	0.79	3.0	30.0	82
-824J	-60*	820	±5%	30	0.79	2.5	45.0	67
-105J	-61*	1000	±5%	30	0.79	2.5	60.0	55

Parts listed above are QPL/MIL qualified