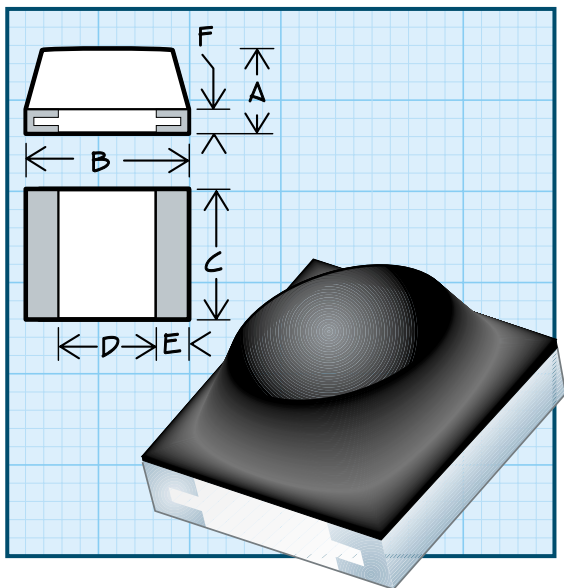


Micro i® Chip Inductors

RF INDUCTORS



Military Specifications MIL-PRF-83446/38

Physical Parameters

	Inches	Millimeters
A	0.080 Max.	2.03 Max.
B	0.145 to 0.155	3.68 to 3.94
C	0.115 to 0.125	2.92 to 3.18
D	0.070 Min.	1.78 Min.
E	0.020 to 0.030	0.508 to 0.762
F	0.020 Max. (Typ.)	0.51 Max.

Current Rating at 90°C Ambient 35°C Rise

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

Maximum Power Dissipation at 90°C 0.175 W

Termination Standard-Tin/Lead. For RoHS, order 160R - XXXKS. Contact factory for other finish options.

Notes 1) Designed specifically for reflow soldering and other high temperature processes with metalized edges to exhibit solder fillet. 2) Optional marking is available. Parts can be printed with dash number (ie 100, 120, etc.). Add suffix M to part number.

For inductance values above 560µH, consult factory.

Mechanical Configuration Units are epoxy encapsulated. Contact area for reflow are solder coated. Internal connections are thermal compression bonded.

Packaging Bulk only

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

Made in the U.S.A.

M83446/38 – SERIES 160 PHENOLIC CORE								
DASH NUMBER*	MIL DASH#	INDUCTANCE (µH)	TOLERANCE	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAX. (ma)
-100MS	01	0.010	± 20%	48	150	900	0.050	1590
-120MS	02	0.012	± 20%	48	150	900	0.055	1515
-150MS	03	0.015	± 20%	48	150	900	0.060	1450
-180MS	04	0.018	± 20%	48	150	900	0.065	1395
-220MS	05	0.022	± 20%	48	100	900	0.070	1345
-270MS	06	0.027	± 20%	48	100	900	0.075	1295
-330MS	07	0.033	± 20%	48	100	900	0.075	1295
-390MS	08	0.039	± 20%	48	100	900	0.080	1255
-470MS	09	0.047	± 20%	48	100	850	0.085	1220
-560MS	10	0.056	± 20%	48	100	800	0.088	1195
-680MS	11	0.068	± 20%	48	100	750	0.093	1165
-820MS	12	0.082	± 20%	48	100	700	0.095	1150

M83446/38 – SERIES 160 IRON CORE								
DASH NUMBER*	MIL DASH#	INDUCTANCE (µH)	TOLERANCE	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAX. (ma)
-101KS	13	0.100	± 10%	50	25.0	600	0.075	1295
-121KS	14	0.120	± 10%	50	25.0	550	0.075	1295
-151KS	15	0.150	± 10%	50	25.0	420	0.085	1220
-181KS	16	0.180	± 10%	50	25.0	390	0.10	1125
-221KS	17	0.220	± 10%	50	25.0	340	0.11	1070
-271KS	18	0.270	± 10%	50	25.0	290	0.12	1025
-301KS	19	0.300	± 10%	50	25.0	250	0.13	985
-331KS	20	0.330	± 10%	50	25.0	230	0.14	950
-361KS	21	0.360	± 10%	50	25.0	220	0.15	915
-391KS	22	0.390	± 10%	50	25.0	210	0.16	890
-421KS	23	0.430	± 10%	50	25.0	200	0.17	860
-471KS	24	0.470	± 10%	50	25.0	190	0.18	835
-561KS	25	0.560	± 10%	50	25.0	180	0.20	795
-681KS	26	0.680	± 10%	50	25.0	170	0.23	740
-821KS	27	0.820	± 10%	50	25.0	150	0.26	695
-102JS	28	1.00	± 5%	50	25.0	140	0.34	610
-122JS	29	1.20	± 5%	36	7.9	130	0.42	545
-152JS	30	1.50	± 5%	36	7.9	120	0.56	475
-182JS	31	1.80	± 5%	36	7.9	100	0.76	410
-222JS	32	2.20	± 5%	36	7.9	98	0.93	370
-272JS	33	2.70	± 5%	40	7.9	91	1.2	325
-332JS	34	3.30	± 5%	40	7.9	76	1.3	310
-392JS	35	3.90	± 5%	47	7.9	48	1.5	290
-472JS	36	4.70	± 5%	47	7.9	46	1.7	275
-562JS	37	5.60	± 5%	44	7.9	42	1.8	270
-682JS	38	6.80	± 5%	40	7.9	39	1.9	255
-822JS	39	8.20	± 5%	40	7.9	30	2.4	230
-103JS	40	10.0	± 5%	46	7.9	26	3.2	200
-123JS	41	12.0	± 5%	41	2.5	24	3.7	185
-153JS	42	15.0	± 5%	46	2.5	23	3.8	180
-183JS	43	18.0	± 5%	46	2.5	22	4.2	175
-223JS	44	22.0	± 5%	47	2.5	18	5.5	150
-273JS	45	27.0	± 5%	47	2.5	17	6.1	145
-333JS	46	33.0	± 5%	47	2.5	13	6.6	140
-393JS	47	39.0	± 5%	50	2.5	12	7.0	135

M83446/38 – SERIES 160 FERRITE CORE								
DASH NUMBER*	MIL DASH#	INDUCTANCE (µH)	TOLERANCE	Q MINIMUM	TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAX. (ma)
-473JS	48	47.0	± 5%	50	2.5	11.0	8.3	125
-563JS	49	56.0	± 5%	50	2.5	10.0	8.9	120
-683JS	50	68.0	± 5%	50	2.5	9.1	13.0	100
-823JS	51	82.0	± 5%	50	2.5	8.6	14.0	95
-104JS	52	100.0	± 5%	47	2.5	7.6	16.0	90
-124JS	53	120.0	± 5%	30	0.79	6.8	17.0	85
-154JS	54	150.0	± 5%	32	0.79	5.6	18.0	80
-184JS	55	180.0	± 5%	32	0.79	4.5	22.0	75
-224JS	56	220.0	± 5%	32	0.79	4.0	28.0	70
-274JS	57	270.0	± 5%	32	0.79	3.8	32.0	65
-334JS	58	330.0	± 5%	32	0.79	3.5	44.0	55
-394JS	59	390.0	± 5%	32	0.79	3.4	48.0	50
-474JS	60	470.0	± 5%	28	0.79	3.2	75.0	42
-564JS	61	560.0	± 5%	28	0.79	2.8	81.0	40

Parts listed above are QPL/MIL qualified

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

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