

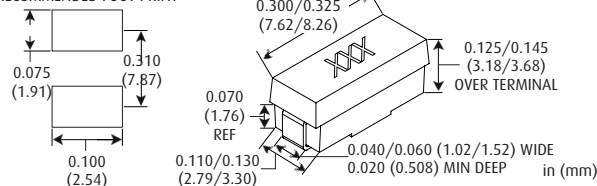
SMRF3013 SERIES

Molded Unshielded Inductor

COTS Military Specifications:
M83446/31, M83446/32, M83446/33 (reference only)



RECOMMENDED FOOT PRINT



PART NUMBER	L μ H	Q MIN	TEST FREQ MHz	SRF MHz MIN	DCR Ω MAX	CURRENT RATING mA DC
PHENOLIC CORE						
SMRF3013-100K	0.10	40	25	680	0.080	1590
SMRF3013-110J	0.11	40	25	660	0.085	1542
SMRF3013-120K	0.12	40	25	640	0.090	1499
SMRF3013-130J	0.13	38	25	625	0.095	1459
SMRF3013-150K	0.15	38	25	600	0.100	1422
SMRF3013-160J	0.16	35	25	580	0.110	1356
SMRF3013-180K	0.18	35	25	550	0.120	1298
SMRF3013-200J	0.20	33	25	530	0.130	1247
SMRF3013-220K	0.22	33	25	510	0.140	1202
SMRF3013-240J	0.24	33	25	475	0.150	1161
SMRF3013-270K	0.27	33	25	430	0.160	1124
SMRF3013-300J	0.30	30	25	420	0.190	1032
SMRF3013-330K	0.33	30	25	410	0.220	959
SMRF3013-360J	0.36	30	25	385	0.260	882
SMRF3013-390K	0.39	30	25	365	0.300	821
SMRF3013-430J	0.43	30	25	345	0.325	789
SMRF3013-470K	0.47	30	25	330	0.350	760
SMRF3013-510J	0.51	30	25	310	0.420	649
SMRF3013-560K	0.56	30	25	300	0.500	636
SMRF3013-620J	0.62	28	25	290	0.550	606
SMRF3013-680K	0.68	28	25	275	0.600	580
SMRF3013-750J	0.75	28	25	265	0.710	534
SMRF3013-820K	0.82	28	25	250	0.850	488
SMRF3013-910J	0.91	25	25	240	0.925	468
SMRF3013-101K	1.0	25	25	230	1.00	450
POWDERED IRON CORE						
SMRF3013-111J	1.1	25	7.9	165	0.170	1100
SMRF3013-121K	1.2	25	7.9	150	0.180	1060
SMRF3013-131J	1.3	28	7.9	145	0.200	1005
SMRF3013-151K	1.5	28	7.9	140	0.220	959
SMRF3013-161J	1.6	30	7.9	135	0.250	899
SMRF3013-181K	1.8	30	7.9	125	0.300	821
SMRF3013-201J	2.0	30	7.9	120	0.350	760
SMRF3013-221K	2.2	30	7.9	115	0.400	711
SMRF3013-241J	2.4	37	7.9	109	0.460	663
SMRF3013-271K	2.7	37	7.9	100	0.550	606
SMRF3013-301J	3.0	45	7.9	95	0.700	537
SMRF3013-331K	3.3	45	7.9	90	0.850	488
SMRF3013-361J	3.6	45	7.9	85	0.925	468
SMRF3013-391K	3.9	45	7.9	80	1.00	450
SMRF3013-431J	4.3	45	7.9	77	1.10	429
SMRF3013-471K	4.7	45	7.9	75	1.20	410
SMRF3013-511J	5.1	50	7.9	69	1.47	371
SMRF3013-561K	5.6	50	7.9	65	1.80	335
SMRF3013-621J	6.2	50	7.9	62	1.90	326
SMRF3013-681K	6.8	50	7.9	60	2.00	318
SMRF3013-751J	7.5	50	7.9	57	2.35	293
SMRF3013-821K	8.2	55	7.9	55	2.70	274
SMRF3013-911J	9.1	55	7.9	52	3.00	260
SMRF3013-102K	10	55	7.9	50	3.30	234
SMRF3013-112J	11	45	2.5	45	2.60	279
SMRF3013-122K	12	45	2.5	40	2.70	274
SMRF3013-132J	13	45	2.5	38	2.80	269
SMRF3013-152K	15	45	2.5	35	2.80	269
SMRF3013-162J	16	45	2.5	33	2.90	264
SMRF3013-182K	18	50	2.5	30	3.10	255
SMRF3013-202J	20	50	2.5	27.5	3.20	251
SMRF3013-222K	22	50	2.5	25	3.30	248
SMRF3013-242J	24	50	2.5	23	3.40	244
SMRF3013-272K	27	50	2.5	20	3.50	240
FERRITE CORE						
SMRF3013-302J	30	45	2.5	22	3.3	248
SMRF3013-332K	33	45	2.5	24	3.4	244
SMRF3013-362J	36	45	2.5	23	3.5	240
SMRF3013-392K	39	45	2.5	22	3.6	237
SMRF3013-432J	43	45	2.5	21	4.1	222
SMRF3013-472K	47	45	2.5	20	4.5	212
SMRF3013-512J	51	45	2.5	19	5.0	201

PART NUMBER	L μ H	Q MIN	TEST FREQ MHz	SRF MHz MIN	DCR Ω MAX	CURRENT RATING mA DC
FERRITE CORE (continued)						
SMRF3013-562K	56	45	2.5	18	5.7	188
SMRF3013-622J	62	50	2.5	16.5	6.2	181
SMRF3013-682K	68	50	2.5	15	6.7	174
SMRF3013-752J	75	50	2.5	14.5	7	170
SMRF3013-822K	82	50	2.5	14	7.3	166
SMRF3013-912J	91	50	2.5	13.5	7.7	162
SMRF3013-103K	100	50	2.5	13	8	159
SMRF3013-113J	110	30	0.79	12.5	11	136
SMRF3013-123K	120	30	0.79	12	13	125
SMRF3013-133J	130	30	0.79	11.5	14	120
SMRF3013-153K	150	30	0.79	11	15	116
SMRF3013-163J	160	30	0.79	10.5	16	112
SMRF3013-183K	180	30	0.79	10	17	109
SMRF3013-203J	200	30	0.79	9.5	19	103
SMRF3013-223K	220	30	0.79	9	21	98
SMRF3013-243J	240	30	0.79	8.5	23	93
SMRF3013-273K	270	30	0.79	8	25	90
SMRF3013-303J	300	30	0.79	7.5	27	87
SMRF3013-333K	330	30	0.79	7	28	85
SMRF3013-363J	360	30	0.79	6.75	32	79
SMRF3013-393K	390	30	0.79	6.5	35	76
SMRF3013-433J	430	30	0.79	6.25	39	72
SMRF3013-473K	470	30	0.79	6	42	69
SMRF3013-513J	510	30	0.79	5.5	44	68
SMRF3013-563K	560	30	0.79	5	46	66
SMRF3013-623J	620	30	0.79	4.6	53	62
SMRF3013-683K	680	30	0.79	4	60	58
SMRF3013-753J	750	30	0.79	4	63	57
SMRF3013-823K	820	30	0.79	3.8	65	56
SMRF3013-913J	910	30	0.79	3.6	69	54
SMRF3013-104K	1000	30	0.79	3.4	72	53

NOTES

- Operating Temperature Range:** -55°C to +125°C
- Current Rating** is based on a 35°C temperature rise at an ambient temperature of 90°C
- Weight Max:** 0.20 grams
- Marking:** XXX (dash number) (see diagram above)
- Epoxy-encapsulated for environmental protection and superior strength to withstand all types of reflow soldering
- Materials are fungus-inert to meet method 508 of MIL-STD-810H
- Custom designs are available to meet your specific requirements; please contact factory
- Applications include:** Electronic test equipment, medical equipment, telecommunications, disk drives, computers and modems, aviation equipment, navigation equipment and cable TV.

PART NUMBER DERIVATION

SMRF3013 - 100 K LF

GEC Series ———

Inductance: 2 signif. digits & mult.
ex: 100 = 0.10 μ H, 101 = 1.0 μ H, 102 = 10 μ H, 103 = 100 μ H

Tolerance: M = 20%, K = 10%, J = 5%
(Table shows lowest standard tolerance option)
Optional tolerances are available; contact factory

Termination: LF = RoHS, No Suffix = SnPB (Standard) ———

TAPE AND REEL SPECS

Pieces/reel maximum: 2200

Pitch between parts: 8 mm

Tape width: 16 mm

Reel diameter: 13 in.