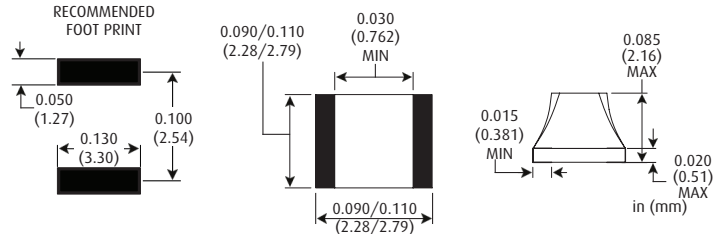


MLRF1010 SERIES

MIL-PRF-83446/4 Qualified Epoxy-Coated Chip Inductor

Military Specifications:
M83446/4



PART NUMBER	MIL DASH NO.	L μH	IND TOL %	Q MIN	TEST FREQ MHz	SRF MHz MIN ¹	DCR Ω MAX	CURRENT RATING mA DC MAX ²
MIL-PRF-83446/4 PHENOLIC CORE								
MLRF1010-010K	30/37	0.010	20/10	60	50	2700	0.060	1270
MLRF1010-012K	38	0.012	10	57	50	2450	0.069	1190
MLRF1010-015K	31/39	0.015	20/10	55	50	2200	0.078	1110
MLRF1010-018K	40	0.018	10	52	50	2000	0.093	1030
MLRF1010-022K	32/41	0.022	20/10	50	50	1800	0.108	950
MLRF1010-027K	42	0.027	10	49	50	1625	0.114	925
MLRF1010-033K	33/43	0.033	20/10	48	50	1450	0.120	900
MLRF1010-039K	44	0.039	10	45	50	1335	0.133	860
MLRF1010-047K	34/45	0.047	20/10	42	50	1220	0.145	820
MLRF1010-056K	46	0.056	10	39	50	1110	0.170	760
MLRF1010-068K	35/47	0.068	20/10	36	50	1000	0.195	705
MLRF1010-082K	48	0.082	10	34	50	915	0.212	675
MLRF1010-100K	36/49	0.100	20/10	32	50	830	0.230	650
MIL-PRF-83446/4 FERRITE CORE								
MLRF1010-120K	01	0.120	10	30	25	750	0.125	880
MLRF1010-150K	02	0.150	10	25	25	650	0.175	745
MLRF1010-180K	03	0.180	10	25	25	550	0.200	695
MLRF1010-220K	04	0.220	10	25	25	450	0.220	665
MLRF1010-270K	05	0.270	10	25	25	375	0.230	650
MLRF1010-330K	06	0.330	10	25	25	300	0.235	645
MLRF1010-390K	07	0.390	10	22	25	235	0.240	635
MLRF1010-470K	08	0.470	10	22	25	215	0.260	610
MLRF1010-560K	09	0.560	10	22	25	195	0.278	590
MLRF1010-680K	10	0.680	10	22	25	175	0.520	435
MLRF1010-820K	11	0.820	10	22	25	160	0.530	430
MLRF1010-101K	12	1.0	10	22	25	145	0.540	425
MLRF1010-121K	13	1.2	10	22	7.9	130	0.740	360
MLRF1010-151K	14	1.5	10	22	7.9	115	0.840	340
MLRF1010-181K	15	1.8	10	22	7.9	105	0.920	325
MLRF1010-221K	16	2.2	10	22	7.9	85	1.00	310
MLRF1010-271K	17	2.7	10	24	7.9	77	1.15	290
MLRF1010-331K	18	3.3	10	24	7.9	70	1.40	260
MLRF1010-391K	19	3.9	10	24	7.9	68	1.55	250
MLRF1010-471K	20	4.7	10	24	7.9	60	1.80	230
MLRF1010-561K	21	5.6	10	22	7.9	55	2.00	220
MLRF1010-681K	22	6.8	10	22	7.9	50	2.20	210
MLRF1010-821K	23	8.2	10	22	7.9	48	2.50	195
MLRF1010-102K	24	10	10	24	7.9	40	3.45	165
MLRF1010-122K	25	12	10	25	2.5	35	3.80	160
MLRF1010-152K	26	15	10	25	2.5	30	5.60	135
MLRF1010-182K	27	18	10	25	2.5	28	5.80	130
MLRF1010-222K	28	22	10	25	2.5	25	6.40	125
MLRF1010-272K	29	27	10	25	2.5	22	6.90	120

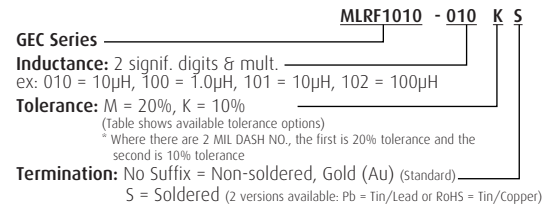
¹ SRF values above 250 MHz are calculated and are for reference only.

² These values are also the maximum incremental current for ferrites only. Incremental current will not change the inductance more than 5% from the zero DC inductance measurement.

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
- **DWV** 200 Vrms @ Sea Level
80 Vrms @ 70,000 Feet
- **Maximum Power Dissipation** at 90°C Ambient: 0.135 Watts
- **Weight Max:** 0.50 grams

PART NUMBER DERIVATION



EXAMPLE OF ORDERING BY MILITARY PART NUMBER:

MLRF1010-010K → M83446/4-30B
MLRF1010-010KS → M83446/4-30F

TAPE AND REEL SPECS

Pieces/reel maximum:	2000
Pitch between parts:	4 mm
Tape width:	8 mm
Reel diameter:	7 in.