

MLP5025 SERIES



M27 Unshielded High Current T-Level Inductor

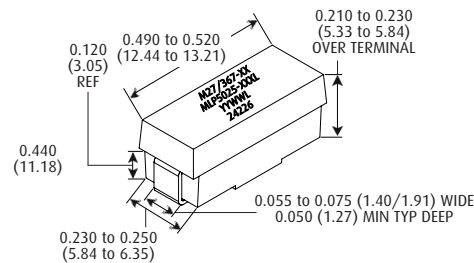
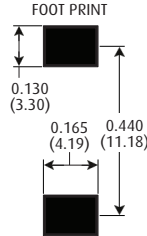
Military Specifications:

MIL-PRF-27/367, T-Level Qualified

Outgassing Tested per ASTM E595 (*)



RECOMMENDED FOOT PRINT



in (mm)

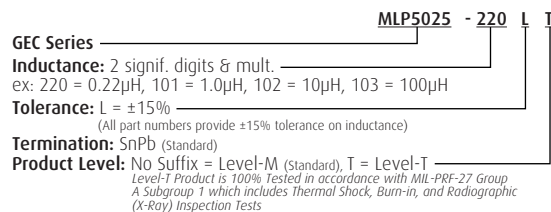
PART NUMBER	MIL DASH NO.	L μH ¹	DCR Ω MAX	CURRENT RATING A DC	INC I A DC
M27/367 FERRITE CORE					
MLP5025-220L*	01*	0.22	0.0080	7.00	7.00
MLP5025-270L*	02*	0.27	0.0085	6.75	6.75
MLP5025-330L*	03*	0.33	0.0090	6.50	6.50
MLP5025-390L*	04*	0.39	0.0095	6.25	6.25
MLP5025-470L*	05*	0.47	0.0100	6.00	6.00
MLP5025-560L*	06*	0.56	0.0105	5.80	5.80
MLP5025-680L*	07*	0.68	0.0110	5.70	5.70
MLP5025-820L*	08*	0.82	0.0120	5.60	5.60
MLP5025-101L*	09*	1.0	0.0130	5.50	5.50
MLP5025-121L*	10*	1.2	0.0180	4.69	4.69
MLP5025-151L*	11*	1.5	0.0200	4.45	4.45
MLP5025-181L*	12*	1.8	0.0210	4.34	4.34
MLP5025-221L*	13*	2.2	0.0290	3.70	3.70
MLP5025-271L*	14*	2.7	0.0340	3.41	3.41
MLP5025-331L*	15*	3.3	0.0380	3.23	3.23
MLP5025-391L*	16*	3.9	0.0420	3.07	3.07
MLP5025-471L*	17*	4.7	0.0470	2.90	2.90
MLP5025-561L*	18*	5.6	0.0510	2.79	2.79
MLP5025-681L*	19*	6.8	0.0580	2.61	2.61
MLP5025-821L*	20*	8.2	0.0630	2.51	2.51
MLP5025-102L*	21*	10	0.0710	2.36	2.36
MLP5025-122L*	22*	12	0.0790	2.24	2.24
MLP5025-152L*	23*	15	0.0890	2.11	2.11
MLP5025-182L*	24*	18	0.1190	1.82	1.82
MLP5025-222L*	25*	22	0.1520	1.61	1.61
MLP5025-272L*	26*	27	0.1790	1.48	1.48
MLP5025-332L*	27*	33	0.2220	1.33	1.33
MLP5025-392L*	28*	39	0.3150	1.12	1.12
MLP5025-472L*	29*	47	0.3620	1.04	1.04
MLP5025-562L*	30*	56	0.3970	1.00	1.00
MLP5025-682L*	31*	68	0.4180	0.970	0.970
MLP5025-822L*	32*	82	0.6040	0.810	0.810
MLP5025-103L*	33*	100	0.6720	0.760	0.760
MLP5025-123L*	34*	120	0.7350	0.730	0.730
MLP5025-153L*	35*	150	0.9980	0.630	0.630
MLP5025-183L*	36*	180	1.37	0.530	0.530
MLP5025-223L*	37*	220	1.58	0.500	0.500
MLP5025-273L*	38*	270	1.77	0.470	0.470
MLP5025-333L*	39*	330	2.51	0.390	0.390
MLP5025-393L*	40*	390	2.73	0.380	0.380
MLP5025-473L*	41*	470	3.25	0.350	0.350
MLP5025-563L*	42*	560	3.75	0.330	0.330
MLP5025-683L*	43*	680	4.31	0.300	0.300
MLP5025-823L*	44*	820	6.04	0.260	0.260
MLP5025-104L*	45*	1000	6.90	0.240	0.240
MLP5025-124L*	46*	1200	10.0	0.200	0.200
MLP5025-154L*	47*	1500	12.5	0.178	0.178
MLP5025-184L*	48*	1800	16	0.157	0.157
MLP5025-224L*	49*	2200	20	0.141	0.141
MLP5025-274L*	50*	2700	23	0.131	0.131
MLP5025-334L*	51*	3300	25	0.126	0.126
MLP5025-394L*	52*	3900	33	0.110	0.110
MLP5025-474L*	53*	4700	37	0.103	0.103
MLP5025-564L*	54*	5600	40	0.100	0.100
MLP5025-684L*	55*	6800	62	0.800	0.800
MLP5025-824L*	56*	8200	66	0.077	0.077
MLP5025-105L*	57*	10000	74	0.071	0.071
MLP5025-125L*	58*	12000	93	0.065	0.065
MLP5025-155L*	59*	15000	105	0.061	0.061
MLP5025-185L*	60*	18000	143	0.052	0.052
MLP5025-225L*	61*	22000	160	0.050	0.050

¹ Measured at 1 V ac open circuit with no DC current at 1 kHz

NOTES

- **Operating Temperature Range:** -55°C to +130°C
- **Current Rating** is based on a 45°C temperature rise at an ambient temperature of 85°C
- **Incremental Current** is the approximate value that will cause a 5% maximum decrease in inductance at a zero DC current
- **DWV** 1000 Vrms @ Sea Level
500 Vrms @ 70,000 Feet
- **Insulation Resistance (IR):** 1,000 MΩ minimum at 500 V dc
- **Vibration:** MIL-STD-202, Method 204, test condition D
- **Moisture Resistance:** MIL-STD-202, Method 106
- **Bond Strength:** Force 2 lbs.
- **Weight Max:** 1.50 grams
- **Marking:** Laser Mark (see diagram above)
- **Case:** Grade 5, encapsulated
- **Body Color:** black
- Materials are fungus-inert to meet method 508 of MIL-STD-810H
- * Meets a TML (Total Mass Loss) requirement of 1.0% maximum when tested in accordance with ASTM E595; this calculation does not include WVR (Water Vapor Recovered)

PART NUMBER DERIVATION



EXAMPLE OF ORDERING BY MILITARY PART NUMBER:
MLP5025-220L → M27-367-01 (Standard Level-M Product Level)
MLP5025-220LT → M27-367-01T (Level-T Product Level)

TAPE AND REEL SPECS:

Pieces/reel maximum:	800
Pitch between parts:	12 mm
Tape width:	24 mm
Reel diameter:	13 in.