

**SERIES**

**105R & 108R**  
**105 & 108**



**Micro i® Chip Inductors**



**Military Specifications**

Series 105 MIL-PRF-83446 (Reference)  
Series 108 MIL-PRF-83446/8 (Reference)

**Physical Parameters for Series 105**

	Inches	Millimeters
A	0.075 Max.	1.91 Max.
B	0.100 ± 0.010	2.54 ± 0.25
C	0.100 ± 0.010	2.54 ± 0.25
D	0.050 Min.	1.27 Min.
E	0.015 Min. (Typ.)	0.38 Min. (Typ.)
F	0.020 Max. (Typ.)	0.51 Max. (Typ.)

**Physical Parameters for Series 108**

	Inches	Millimeters
A	0.070 Max.	1.78 Max.
B	0.100 ± 0.010	2.54 ± 0.254
C	0.100 ± 0.010	2.54 ± 0.254
D	0.050 Min.	1.27 Min.
E	0.025 ± 0.005 (Typ.)	0.635 ± 0.13 (Typ.)
F	0.020 Max. (Typ.)	0.51 Max. (Typ.)

**Weight Max.** (Grams) 0.05

**Current Rating at 90°C Ambient** 35°C Rise

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

**Maximum Power Dissipation at 90°C** 0.135 W

**Mechanical Configuration** Units are epoxy encapsulated. Contact areas for reflow soldering are gold plated per MIL-G-45204 Type 1-Grade A. Internal connections are thermal compression bonded.

**Packaging** Tape & reel (8mm): 7" reel, 2000 pieces max.; 13" reel, 8000 pieces max.

**Made in the U.S.A.**

MIL DASH # (Reference)  
INDUCTANCE (µH)  
TOLERANCE  
Q MINIMUM  
TEST FREQUENCY (MHz)  
SRF MINIMUM (MHz)  
DC RESISTANCE MAXIMUM (OHMS)  
CURRENT RATING MAXIMUM (mA)

SERIES 105 IRON CORE								
-121M		0.12	± 20%	40	25.0	500	0.14	830
-151M		0.15	± 20%	40	25.0	440	0.16	775
-181M		0.18	± 20%	40	25.0	405	0.19	710
-221K		0.22	± 10%	40	25.0	360	0.21	675
-271K		0.27	± 10%	40	25.0	330	0.23	650
-331K		0.33	± 10%	35	25.0	280	0.25	620
-391K		0.39	± 10%	35	25.0	185	0.28	585
-471K		0.47	± 10%	35	25.0	178	0.31	555
-561K		0.56	± 10%	35	25.0	163	0.45	460
-681K		0.68	± 10%	35	25.0	160	0.62	395
-821K		0.82	± 10%	30	25.0	155	0.65	385
-102K		1.0	± 10%	30	25.0	130	0.73	360
-122K		1.2	± 10%	25	7.9	115	1.0	310
-152K		1.5	± 10%	25	7.9	100	1.2	280
-182K		1.8	± 10%	25	7.9	90	1.5	250
-222K		2.2	± 10%	25	7.9	75	1.7	235
-272K		2.7	± 10%	25	7.9	68	2.0	220
-332K		3.3	± 10%	25	7.9	62	2.2	210
-392K		3.9	± 10%	25	7.9	57	2.8	185
-472K		4.7	± 10%	30	7.9	52	3.1	175
-562K		5.6	± 10%	30	7.9	47	3.3	170
-682K		6.8	± 10%	30	7.9	42	3.8	160
-822K		8.2	± 10%	30	7.9	40	5.0	135
-103K		10.0	± 10%	30	7.9	38	5.6	130
M83446/08- (Reference) SERIES 108 IRON CORE								
-123K	87	12.0	± 10%	36	2.5	26.0	4.0	79
-153K	88	15.0	± 10%	32	2.5	24.0	4.2	79
-183K	89	18.0	± 10%	32	2.5	21.0	4.4	75
-223K	90	22.0	± 10%	32	2.5	19.0	7.5	57
-273K	91	27.0	± 10%	32	2.5	14.0	8.0	55
-333K	92	33.0	± 10%	30	2.5	12.0	13.0	45
-393K	93	39.0	± 10%	30	2.5	10.0	17.0	38
-473K	94	47.0	± 10%	30	2.5	9.0	19.0	36
-563K	95	56.0	± 10%	30	2.5	8.5	23.0	33
-683K	96	68.0	± 10%	30	2.5	8.2	25.0	32
-823K	97	82.0	± 10%	30	2.5	8.0	28.0	30
-104K	98	100.0	± 10%	30	2.5	7.0	31.0	28

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%  
\*Complete part # must include series # PLUS the dash #  
For surface finish information, refer to [www.delevan.com](http://www.delevan.com)