

**MINIATURE SQUARE SHIELDED
SMD POWER INDUCTORS
SERIES MSQ1040**

FEATURES

- 100% ferrite shielded. Very high current handling capacity.
- Excellent solderability. High heat resistance. Low price

ELECTRICAL SPECIFICATIONS

- Inductance range 1.50uH to 330uH
- Test conditions (1.5uH -7uH) 0.25Vrms @ 100kHz
- Test conditions (10uH - 330uH) 0.25Vrms @ 1kHz
- Test equipment Quadtech 1750 LCR Meter
- Rated current range 0.7 to 10.0ADC
- Tolerances available M: 20%
Y: 30%

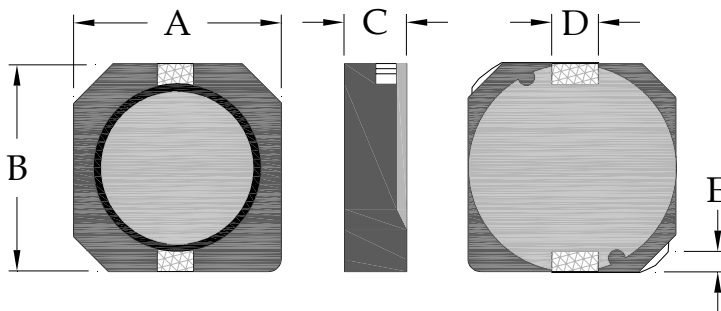
PHYSICAL SPECIFICATIONS

- Operating temperature - 25 °C to +105 °C
- Construction Surface mount
- Shielding 100% ferrite
- Packaging T & R 900 pieces per reel
- Tape & reel spec. 24 mm embossed carrier
330mm reel

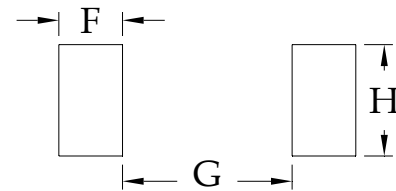
DIMENSIONS IN MILLIMETERS

- Width A 10.3 max
- Length B 10.5 max
- Height C 4.0 max
- Term width D 3.0 ref
- Term length E 1.5 ref
- Pad length F 1.6 ref
- Pad width H 3.2 ref
- Pad pitch G 7.3 ref

Part Number	L(uH)	Tol ± %	DCR (ohms) max	Saturarion Current (A) (Note 1)
MSQ1040-1R5	1.5	Y	0.0081	10.0
MSQ1040-2R5	2.5	Y	0.0105	7.50
MSQ1040-3R8	3.8	Y	0.013	6.00
MSQ1040-5R2	5.2	Y	0.022	5.50
MSQ1040-7R0	7.0	Y	0.027	4.80
MSQ1040-100	10	M,Y	0.035	4.40
MSQ1040-150	15	M,Y	0.050	3.60
MSQ1040-220	22	M,Y	0.073	2.90
MSQ1040-330	33	M,Y	0.093	2.30
MSQ1040-470	47	M,Y	0.128	2.10
MSQ1040-680	68	M,Y	0.213	1.50
MSQ1040-101	100	M,Y	0.304	1.35
MSQ1040-151	150	M,Y	0.506	1.15
MSQ1040-221	220	M,Y	0.756	0.92
MSQ1040-331	330	M,Y	1.090	0.70



SUGGESTED PCB LAYOUT



Notes:

1. Based on ΔL of 35% typical.
2. All test dada based on 25°C ambient. Part temperature (max ambient + temp rise) must not exceed 105°C under worst case operating conditions. Circuit design, other components, PCB trace size and thickness, airflow and other cooling provisions all effect the part temperature.