

# MT-538<sup>SERIES</sup>

## SMD Power Inductors

**MINNTRONIX**

Wind Up the Best®



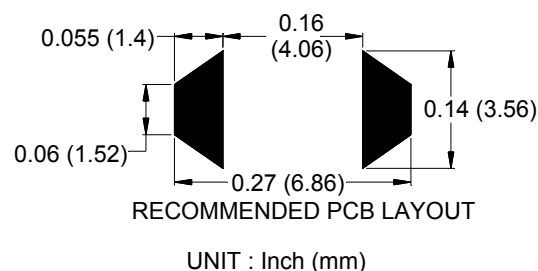
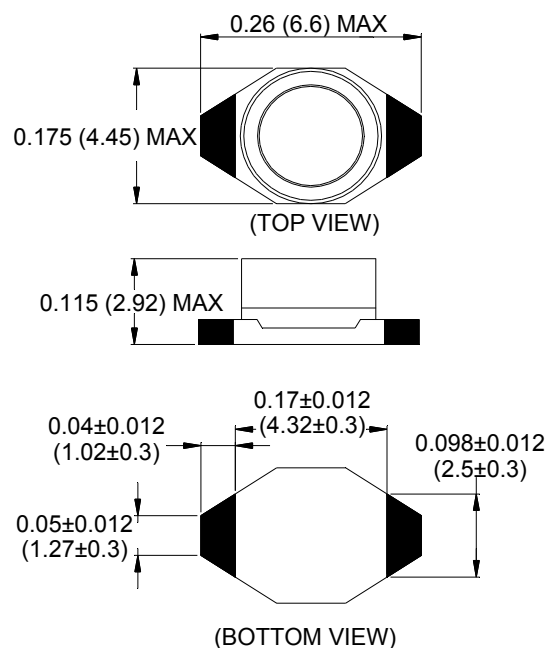
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- Magnetically shielded
- Very small size, high performance, cost-effective package
- Very low DCR, high-energy storage
- Flat top for automatic assembly
- Custom versions available
- Available in Tape & Reel packaging

| Part Number | Inductance <sup>1</sup><br>( $\mu\text{H} \pm 20\%$ ) | Q min        | DCR<br>( $\Omega$ max) | Isat <sup>3</sup><br>(A) |
|-------------|-------------------------------------------------------|--------------|------------------------|--------------------------|
| MT-538-1R0  | 1.0                                                   | 30 @ 200 KHz | 0.040                  | 1.4                      |
| MT-538-1R5  | 1.5                                                   | 30 @ 200 KHz | 0.045                  | 0.93                     |
| MT-538-2R2  | 2.2                                                   | 40 @ 200 KHz | 0.050                  | 0.92                     |
| MT-538-3R3  | 3.3                                                   | 40 @ 200 KHz | 0.055                  | 0.75                     |
| MT-538-4R7  | 4.7                                                   | 40 @ 200 KHz | 0.060                  | 0.58                     |
| MT-538-6R8  | 6.8                                                   | 40 @ 200 KHz | 0.065                  | 0.58                     |
| MT-538-100  | 10                                                    | 40 @ 200 KHz | 0.075                  | 0.37                     |
| MT-538-150  | 15                                                    | 40 @ 100 KHz | 0.090                  | 0.31                     |
| MT-538-220  | 22                                                    | 40 @ 100 KHz | 0.110                  | 0.30                     |
| MT-538-330  | 33                                                    | 40 @ 100 KHz | 0.190                  | 0.30                     |
| MT-538-470  | 47                                                    | 40 @ 100 KHz | 0.230                  | 0.24                     |
| MT-538-680  | 68                                                    | 40 @ 100 KHz | 0.290                  | 0.17                     |
| MT-538-101  | 100                                                   | 40 @ 100 KHz | 0.480                  | 0.13                     |
| MT-538-151  | 150                                                   | 40 @ 100 KHz | 0.590                  | 0.10                     |
| MT-538-221  | 220                                                   | 40 @ 100 KHz | 0.770                  | 0.10                     |
| MT-538-331  | 330                                                   | 40 @ 100 KHz | 1.4                    | 0.07                     |
| MT-538-471  | 470                                                   | 40 @ 100 KHz | 1.8                    | 0.06                     |
| MT-538-681  | 680                                                   | 40 @ 100 KHz | 2.2                    | 0.055                    |
| MT-538-102  | 1000                                                  | 40 @ 100 KHz | 3.4                    | 0.045                    |
| MT-538-152  | 1500                                                  | 50 @ 100 KHz | 4.2                    | 0.035                    |
| MT-538-222  | 2200                                                  | 50 @ 100 KHz | 8.5                    | 0.028                    |
| MT-538-332  | 3300                                                  | 50 @ 100 KHz | 11.0                   | 0.024                    |
| MT-538-472  | 4700                                                  | 50 @ 100 KHz | 13.9                   | 0.021                    |
| MT-538-682  | 6800                                                  | 50 @ 100 KHz | 25.0                   | 0.019                    |
| MT-538-103  | 10000                                                 | 50 @ 100 KHz | 32.8                   | 0.017                    |

### Mechanical Dimensions:



1. Inductance tested at 100kHz, 0.1Vrms, 0Adc
2.  $\Delta T = 30^\circ\text{C}$  rise typ.
3. Operating Temperature range  $-40^\circ\text{C}$  to  $+85^\circ\text{C}$
4. Electrical specifications at  $25^\circ\text{C}$

Specifications subject to change. Custom versions of any Minntronix Products are available upon request.