

# MOX-SPI-3D23H



**MoxiE**<sup>®</sup>  
INDUCTOR CORPORATION

## High Current Surface Mount Shielded Inductors

MoxiE's SPI-3D23H series of surface mount shielded power inductors are widely used in PDA's, notebooks, LCD televisions and digital cameras. MoxiE offers a ultra low profile magnetically shielded package that offer high inductance & high power.

### Features:

- High current.
- Operating temperature: -40°C to +85°C.
- Available tolerances: ±20% & ±25%.
- RoHS compliant.
- Magnetically shielded applications.



## NOTES

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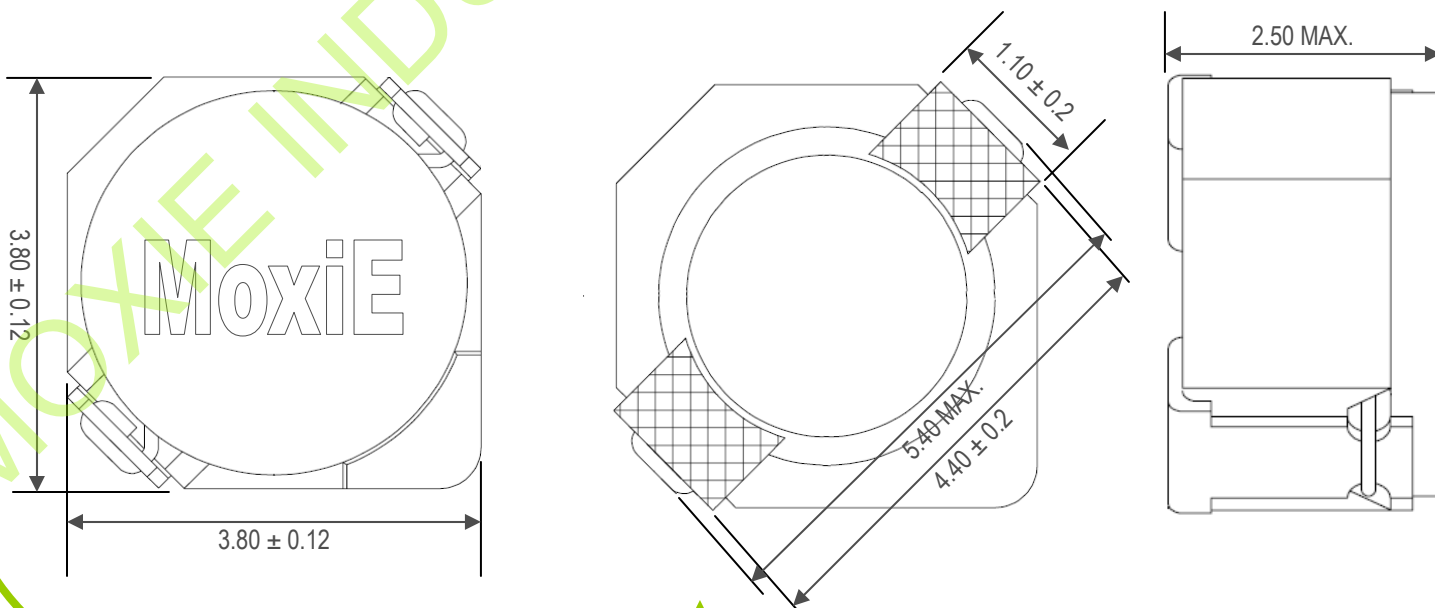
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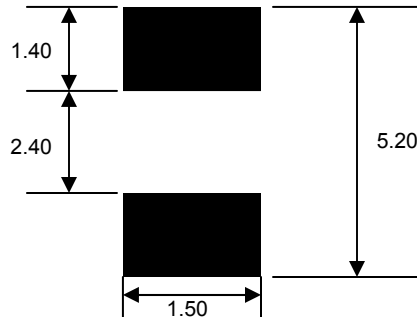
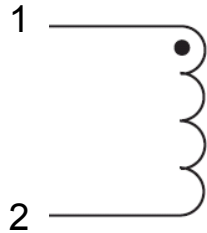


## MECHANICAL DIMENSIONS





## LANDING PATTERN & SCHEMATIC



## ELECTRICAL SPECIFICATIONS

| MoxiE Part Number  | Inductance (μH) 100kHz/1V | DCR (mΩ) Max. | DCR (mΩ) Typ. | ISAT (Amps) @20°C | ISAT (Amps) @100°C | Temperature Rise Current (Amps) |
|--------------------|---------------------------|---------------|---------------|-------------------|--------------------|---------------------------------|
| MOX-SPI-3D23H-1R0N | 1.20 ± 25%                | 25.0          | 19.5          | 2.90              | 2.20               | 3.25                            |
| MOX-SPI-3D23H-1R5N | 1.50 ± 25%                | 28.0          | 23.5          | 2.35              | 1.75               | 3.00                            |
| MOX-SPI-3D23H-2R2N | 2.20 ± 25%                | 38.2          | 30.5          | 1.85              | 1.40               | 2.75                            |
| MOX-SPI-3D23H-3R3N | 3.30 ± 25%                | 56.2          | 43.0          | 1.50              | 1.20               | 2.50                            |
| MOX-SPI-3D23H-4R7N | 4.70 ± 25%                | 68.4          | 54.0          | 1.35              | 1.05               | 1.95                            |
| MOX-SPI-3D23H-5R6N | 5.60 ± 25%                | 74.5          | 59.0          | 1.15              | 0.85               | 1.85                            |
| MOX-SPI-3D23H-6R8N | 6.80 ± 25%                | 86.7          | 71.0          | 1.05              | 0.78               | 1.75                            |
| MOX-SPI-3D23H-8RN  | 8.20 ± 25%                | 94.5          | 75.0          | 1.00              | 0.75               | 1.65                            |
| MOX-SPI-3D23H-100M | 10.00 ± 20%               | 116.0         | 93.0          | 0.90              | 0.65               | 1.47                            |
| MOX-SPI-3D23H-150M | 15.00 ± 20%               | 190.0         | 152.0         | 0.75              | 0.55               | 0.90                            |
| MOX-SPI-3D23H-220M | 22.00 ± 20%               | 268.0         | 217.0         | 0.60              | 0.45               | 0.78                            |
| MOX-SPI-3D23H-330M | 33.00 ± 20%               | 379.0         | 305.0         | 0.55              | 0.38               | 0.62                            |
| MOX-SPI-3D23H-470M | 47.00 ± 20%               | 542.0         | 438.0         | 0.40              | 0.28               | 0.58                            |



## ENGINEERING NOTES

- Rated current: The rated current indicates the current when the inductance decreases to 65% over its nominal value or D.C. current when the temperature rises  $\Delta t=40^{\circ}\text{C}$ .
- MoxiE test instruments: HP4192A LF impedance analyzer. RDC: CH502BC Rated current: HP4284+HP42841A or CH1061+CH301A
- Magnetically shielded to prevent noise radiation.
- MoxiE Inductor Corporation specifications are subject to change without notice.