

MOX-SPI-3D16

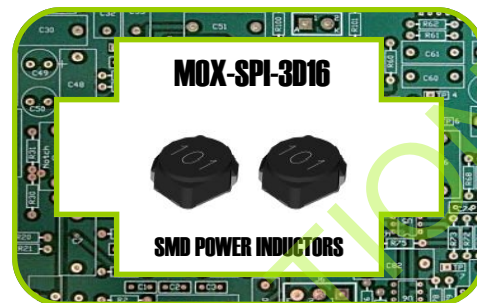


Low Profile Surface Mount Power Inductors

MoxiE's SPI-3D16 series of surface mount power inductors offer a low DCR while providing a high current. An industry leading temperature range of -40°C to $+105^{\circ}\text{C}$ is standard.

Features:

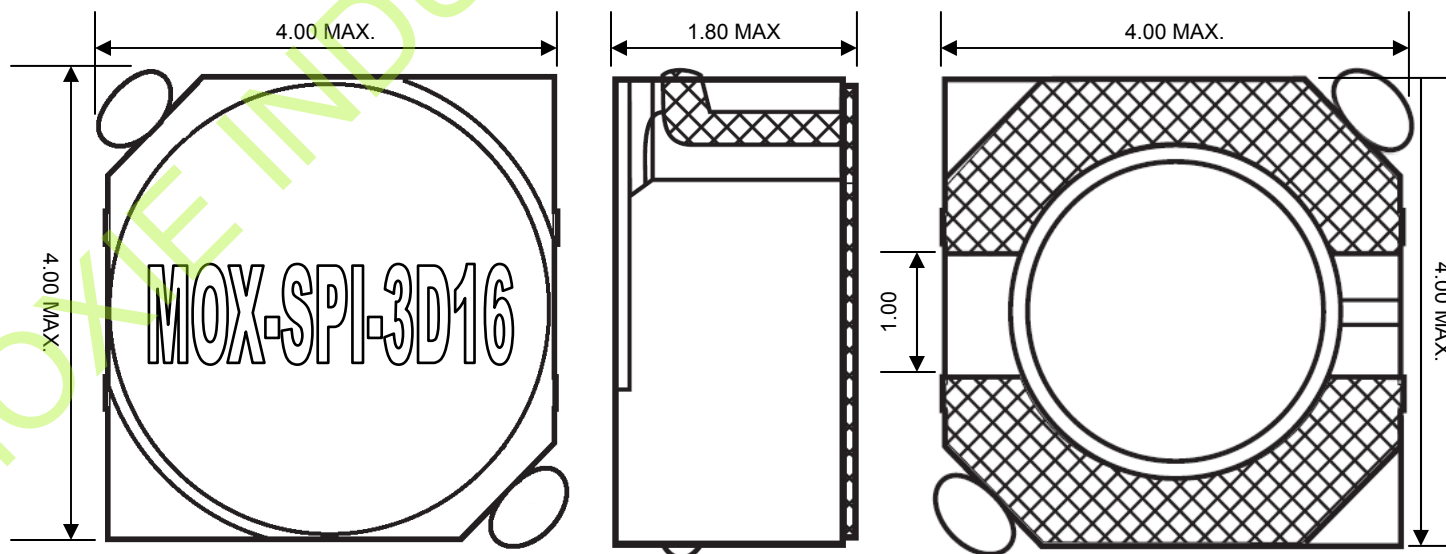
- Low cost.
- Small package.
- High current.
- Operating temperature: -40°C to $+105^{\circ}\text{C}$.
- Available tolerances: $\pm 20\%$
- RoHS compliant.



NOTES

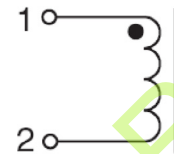
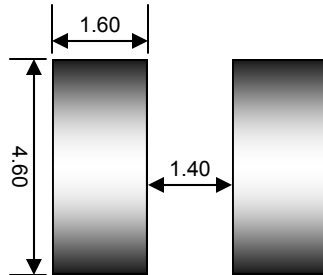


MECHANICAL DIMENSIONS





LANDING PATTERN & SCHEMATIC



ELECTRICAL SPECIFICATIONS

MoxiE Part Number	Inductance (μH)	Test Frequency	RDC (Ω) Maximum	Rated Current (A)	Rated Current Based on Inductance Change (A) Maximum	Tolerance ($\pm\%$)
MOX-SPI-3D16-1R0R	1.0	100 KHz, 0.1 V	0.040	1.60	2.50	30
MOX-SPI-3D16-1R5R	1.5	100 KHz, 0.1 V	0.052	1.55	2.10	30
MOX-SPI-3D16-2R2R	2.2	100 KHz, 0.1 V	0.072	1.20	1.70	30
MOX-SPI-3D16-3R3□	3.3	100 KHz, 0.1 V	0.085	1.10	1.40	20,30
MOX-SPI-3D16-3R6R	3.6	100 KHz, 0.1 V	0.09	0.95	1.20	30
MOX-SPI-3D16-4R7□	4.7	100 KHz, 0.1 V	0.105	0.90	1.00	20,30
MOX-SPI-3D16-6R8R	6.8	100 KHz, 0.1 V	0.170	0.73	0.89	30
MOX-SPI-3D16-100□	10	100 KHz, 0.1 V	0.210	0.55	0.70	20,30
MOX-SPI-3D16-150□	15	100 KHz, 0.1 V	0.295	0.45	0.63	20,30
MOX-SPI-3D16-220□	22	100 KHz, 0.1 V	0.430	0.40	0.47	20,30
MOX-SPI-3D16-270R	27	100 KHz, 0.1 V	0.620	0.35	0.44	30
MOX-SPI-3D16-330R	33	100 KHz, 0.1 V	0.675	0.32	0.42	30
MOX-SPI-3D16-680R	68	100 KHz, 0.1 V	1.70	0.18	0.23	30
MOX-SPI-3D16-101R	100	100 KHz, 0.1 V	2.75	0.13	0.18	30



MOX-SPI-3D16 ENGINEERING NOTES

MOXIE NOTES:

- = TOLERANCE (M=20% & R=30%)
- ALL DIMENSIONS IN MILLIMETERS.
- RoHS COMPLIANT.
- OPERATING TEMPERATURE: -40°C TO +105°C.
- RATED CURRENT: VALUE OBTAINED WHEN CURRENT FLOWS AND THE TEMPERATURE HAS RISEN TO 40°C OR WHEN THE DC CURRENT FLOW AND THE NOMINAL VALUE OF INDUCTANCE HAS FALLEN BY 30%, WHICHEVER IS LESS.
- MOXIE INDUCTOR CORPORATION CUSTOM DESIGNS AVAILABLE.
- MOXIE INDUCTOR CORPORATION SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.