

New Product

**SURFACEMOUNT
POWER INDUCTOR
SERIES NSDI2169**

FEATURES

- RoHS compliant
- High current handling capacity
- Small footprint and low profile
- For use in DC-DC converter, PDA, cell phone, LCD display

ELECTRICAL SPECIFICATIONS

- Inductance range 1uH to 82uH
- Test condition (1uH - 8.2uH) 100kHz @ 0.25Vrms
- Test condition (10uH - 82uH) 1kHz @ 0.25Vrms
- Test equipment Quadtech 1750 LCR Meter

PHYSICAL SPECIFICATIONS

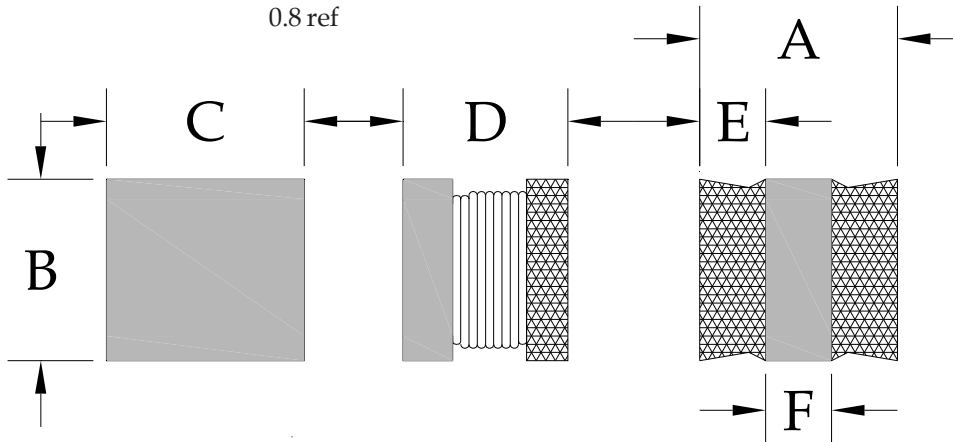
- Operating temp. -25°C to +105°C
- Core Ferrite
- Packaging T & R 3000 pieces per reel
- Tape & reel spec. Tape 8 mm embossed carrier
- Reel 178 mm

Dimensions in millimeters

- Length A 2.0 ± 0.5
- Width B 1.6 ± 0.3
- Length C 2.0 ± 0.3
- Height D 0.9 ± 0.3
- Terminal length E 0.6 ref
- Terminal pitch F 0.8 ref

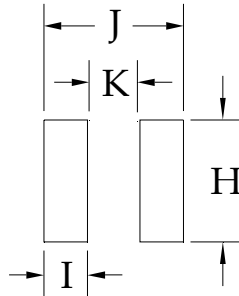
SPECIFICATIONS

Part Number	L(uH)	Tol % ±	DCR (ohms) max	Saturation Current (A) (Note 1)
NSDI2169-1R0M	1.0	20	0.39	0.485
NSDI2169-4R7M	4.7	20	1.04	0.300
NSDI2169-5R6M	5.6	20	1.17	0.280
NSDI2169-6R8M	6.8	20	1.30	0.255
NSDI2169-8R2M	8.2	20	1.56	0.235
NSDI2169-100M	10	20	1.93	0.225
NSDI2169-120M	12	20	2.37	0.210
NSDI2169-150M	15	20	3.20	0.200
NSDI2169-180M	18	20	3.60	0.190
NSDI2169-220M	22	20	3.91	0.185
NSDI2169-270M	27	20	6.34	0.180
NSDI2169-330M	33	20	7.09	0.160
NSDI2169-390M	39	20	7.99	0.125
NSDI2169-470M	47	20	11.89	0.120
NSDI2169-560M	56	20	13.29	0.110
NSDI2169-680M	68	20	15.16	0.100
NSDI2169-820M	82	20	17.52	0.090



Suggested PCB land pattern

- H = 2.2
- I = 1.0
- J = 2.6
- K = 0.6



Notes:

1. Based on ΔL of 10% max
2. All test data 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.