

New Product

**SURFACEMOUNT
POWER INDUCTOR
SERIES NSDI4012**

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 47uH
- Test condition (1.0uH - 6.8uH) 100kHz @ 0.25Vrms
- Test condition (10uH - 47uH) 1kHz @ 0.25Vrms
- Test equipment Quadtech 1750 LCR Meter

PHYSICAL SPECIFICATIONS

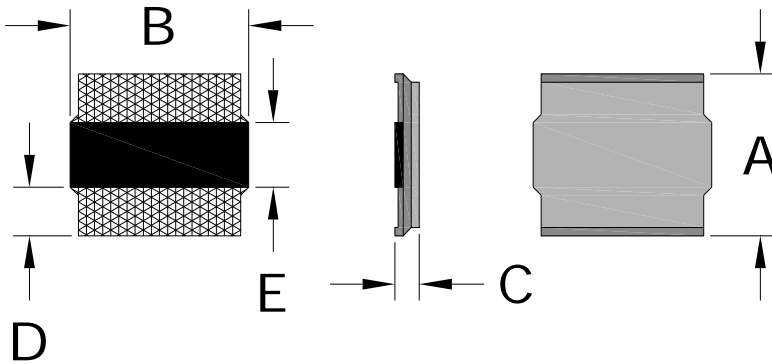
- Operating temp. -25°C to +105°C
- Core Ferrite
- Packaging T & R 1000 or 3500 pieces per reel
- Tape 12 mm embossed carrier
- Tape & reel spec. Reel 178 or 330 mm dia

SPECIFICATIONS

Part Number	L(uH)	Tol % ±	DCR (ohms) max	Saturation Current (A) (Note 1)
NSDI4012-1R0M	1.0	20	0.067	1.95
NSDI4012-2R2M	2.2	20	0.14	1.40
NSDI4012-3R3M	3.3	20	0.21	1.15
NSDI4012-4R7M	4.7	20	0.29	0.91
NSDI4012-6R8M	6.8	20	0.44	0.77
NSDI4012-100M	10	20	0.62	0.66
NSDI4012-150M	15	20	0.93	0.54
NSDI4012-220M	22	20	1.25	0.46
NSDI4012-330M	33	20	1.84	0.36
NSDI4012-470M	47	20	2.66	0.31

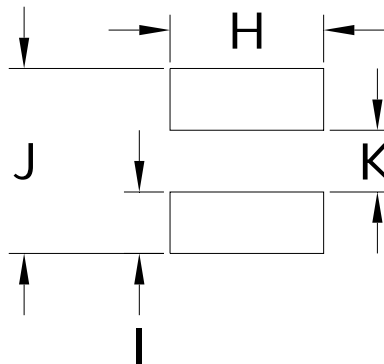
Dimensions in millimeters

- Width A 4.0 ± 0.2
- Length B 4.0 ± 0.2
- Height C 1.2 max
- Terminal width D 1.0 ref
- Spacing E 2.0 ref



Suggested PCB land pattern

- H = 4.6
- I = 1.5
- J = 4.6
- K = 1.6



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.