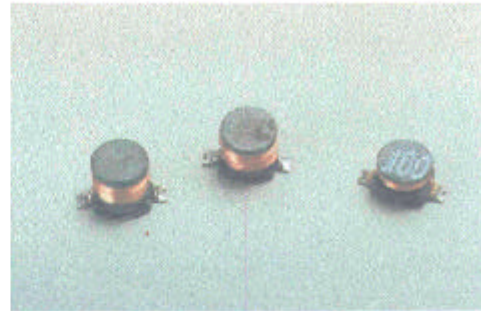


# SMD INDUCTORS

MODEL NO. : SMI-40 / SMI-50 SERIES

## FEATURES:

- \* SUPERIOR QUALITY FROM AN AUTOMATED PRODUCTION LINE.
- \* PICK AND PLACE COMPATIBLE.
- \* TAPE AND REEL PACKING.



## APPLICATION :

- \* NOTEBOOK COMPUTERS.
- \* DC-DC CONVERTORS.
- \* DC-AC INVERTERS.
- \* SIGNAL CONDITIONING
- \* CELLULAR TELEPHONES
- \* FILTERING.
- \* HYBRIDS
- \* PAGERS.

## ELECTRICAL SPECIFICATION:

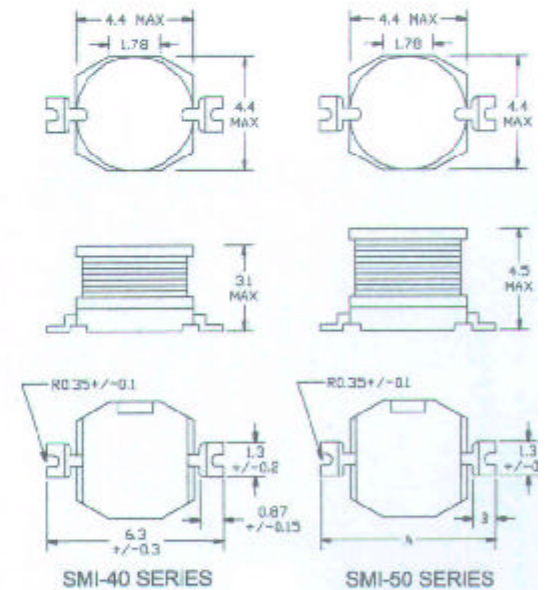
(UNIT:mm)

### SMI-40 SERIES

### SMI-50 SERIES

MODEL NO.	L (uH)	DCR MAX (OHMS)	RATED DC CURRENT (mA)	MODEL NO.	L (uH)	DCR MAX (OHMS)	RATED DC CURRENT (mA)
SMI-40-1R0	1.0	0.04	500	SMI-50-3R3	3.3	0.054	500
SMI-40-1R5	1.5	0.06	450	SMI-50-4R7	4.7	0.064	500
SMI-40-2R2	2.2	0.07	400	SMI-50-6R8	6.8	0.075	500
SMI-40-3R3	3.3	0.10	300	SMI-50-8R2	8.2	0.094	450
SMI-40-4R7	4.7	0.15	250	SMI-50-100	10	0.12	420
SMI-40-6R8	6.8	0.17	220	SMI-50-120	12	0.15	400
SMI-40-100	10	0.24	200	SMI-50-150	15	0.16	400
SMI-40-120	12	0.30	180	SMI-50-220	22	0.22	400
SMI-40-150	15	0.36	160	SMI-50-330	33	0.35	250
SMI-40-180	18	0.41	160	SMI-50-470	47	0.50	250
SMI-40-220	22	0.55	130	SMI-50-560	56	0.60	200
SMI-40-270	27	0.64	130	SMI-50-680	68	0.65	200
SMI-40-330	33	0.75	100	SMI-50-820	82	0.83	160
SMI-40-390	39	0.83	100	SMI-50-101	100	0.90	160
SMI-40-470	47	1.10	100	SMI-50-151	150	1.50	120
SMI-40-560	56	1.50	80	SMI-50-221	220	2.20	100
SMI-40-680	68	1.60	80	SMI-50-331	330	3.20	100
SMI-40-820	82	2.10	70	SMI-50-471	470	4.70	100
SMI-40-101	100	2.40	70	SMI-50-681	680	7.00	50
SMI-40-121	120	3.20	50	SMI-50-102	1000	11.0	40
SMI-40-151	150	4.50	45				
SMI-40-181	180	5.10	40				
SMI-40-221	220	6.00	40				
SMI-40-271	270	6.80	40				
SMI-40-331	330	8.00	40				
SMI-40-471	470	14.0	40				
SMI-40-681	680	18.0	40				
SMI-40-821	820	24.0	40				
SMI-40-102	1000	27.0	40				

## PHYSICAL DIMENSION :



A:  $6.9 \pm 0.3$ mm FOR 3.3uH~47uH

B:  $1.0 \pm 0.15$ mm

A:  $6.3 \pm 0.3$ mm FOR 56uH~1000uH

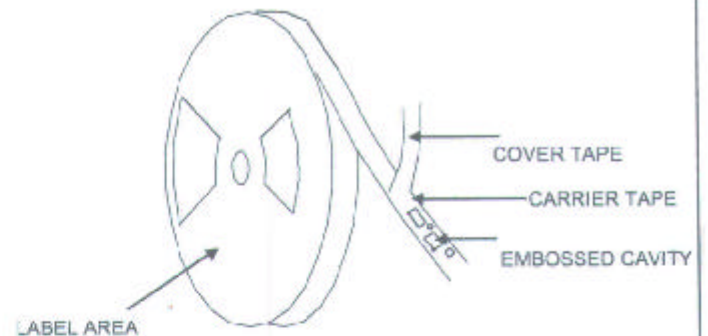
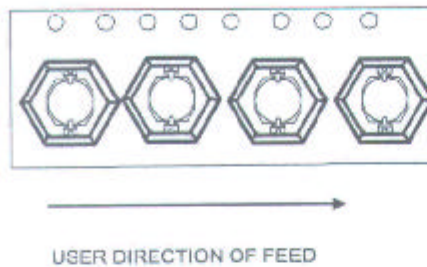
B:  $0.87 \pm 0.15$ mm

NOTE(1): TEST FREQUENCY: 100KHz, 1VRMS.

NOTE(2): 1.0uH-8.2uH  $\pm 20\%$ , 10uH-1000uH  $\pm 10\%$ .

## PACKING

### Tape and Reel Orientation



NOTE : Top view shown with cover tape removed.

MODEL	TYPE WIDTH	REEL WIDTH	COMPONENT PITCH	UNITS PER REEL
SMI-40 SERIES	12 mm	18.4 mm	8 mm	2500
SMI-50 SERIES	16 mm	22.4 mm	8mm	1000

#### TAPE SPECIFICATIONS:

Carrier Tape Type: Conductive.

Cover Tape Type: Antistatic.

Cover Tape Adhesion to Carrier: 10 -70 grams.

#### REEL SPECIFICATIONS:

Non-antistatic.

Diameter (flange) : 13" (330.2mm)

STANDARDS : All embossed carrier tape packaging will be accomplished in compliance with latest revision of EIA-481

"Taping of surface Mount Components for Automatic Placement".

## ENVIRONMENTAL PERFORMANCE

ITEM	TEST	CONDITION
1	Thermal Shock	Ten cycles of 30 minutes @ -55°C, 15 seconds maximum @ room ambient, 30 minutes @ + 125°C, 15 seconds maximum @ room ambient.
2	Vibration	1 cycle of 30 minutes duration per the following: 5-7 Hz constant displacement of .75 inch, 5 minutes, 7-30 Hz constant acceleration of 1.5 g's, 10 minutes, 30-50 Hz constant displacement of 0.033 inch, 5 minutes, 50-500 Hz constant acceleration of 4.2 g's, 10 minutes.
3	Solderability	Per MIL-STD-202, Method 208, except steam aging is omitted and pads are dipped 30 from vertical. Solder temperature: + 245°C ±5°C. Immersion dwell time: 5±1/2 seconds.
4	Storage Life	Subject the component to 168 hours at + 85°C and 85% relative humidity.
5	Moisture Resistance	Precondition at + 40°C for 60 minutes. Subject the component to 240 hours at + 40°C and 90 to 95% relative humidity.
6	Mechanical Shock	One-half sine pulse (8700 g's for 0.3 milliseconds) in each direction along 3 mutually perpendicular axes in each direction (total of 6 shocks).