

SMD INDUCTORS

MODEL NO. : SMI-90 SERIES

FEATURES:

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

APPLICATION :

- * NOTEBOOK COMPUTERS.
- * SIGNAL CONDITIONING
- *PDA.
- * DC-DC CONVERTORS.
- * CELLULAR TELEPHONES
- *DC-AC INVERTERS.
- *FILTERING.

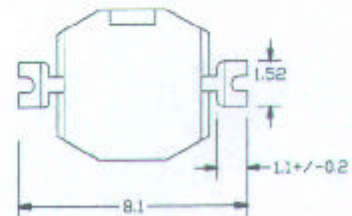
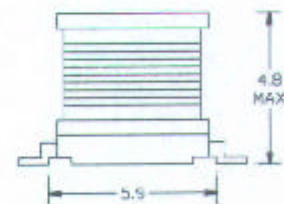
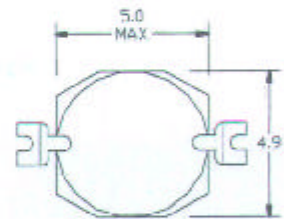


ELECTRICAL SPECIFICATION:

MODEL NO.	L (uH)	D.C.R. MAX (OHMS)	RATED DC CURRENT (mA)
SMI-90-3R3	3.3	0.037	1100
SMI-90-4R7	4.7	0.050	1100
SMI-90-6R8	6.8	0.075	900
SMI-90-100	10	0.13	700
SMI-90-120	12	0.14	700
SMI-90-150	15	0.17	700
SMI-90-180	18	0.20	700
SMI-90-220	22	0.23	600
SMI-90-270	27	0.29	550
SMI-90-330	33	0.33	550
SMI-90-390	39	0.40	550
SMI-90-470	47	0.45	500
SMI-90-560	56	0.55	450
SMI-90-680	68	0.65	400
SMI-90-820	82	0.80	350
SMI-90-101	100	1.05	300
SMI-90-121	120	1.4	250
SMI-90-151	150	1.7	200
SMI-90-181	180	1.9	200
SMI-90-221	220	2.4	180
SMI-90-271	270	2.8	180
SMI-90-331	330	3.7	150
SMI-90-471	470	5.0	120
SMI-90-681	680	6.4	100
SMI-90-821	820	8.8	80
SMI-90-102	1000	11.5	75

NOTE(1): TEST FREQUENCY: 100KHz, 1VRMS.
NOTE(2): 3.3uH-6.8uH ±20%, 10uH-1000uH ±10%.

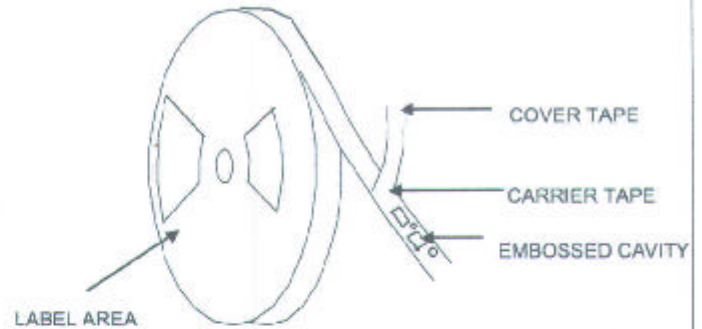
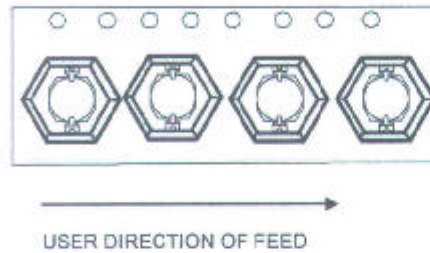
PHYSICAL DIMENSION : (UNIT:mm)



TOLERANCE +/- 0.3

PACKING

Tape and Reel Orientation



NOTE : Top view shown with cover tape removed.

TAPE WIDTH	REEL WIDTH	COMPONENT PITCH	UNITS PER REEL
16mm	22.4mm	8mm	1500

TAPE SPECIFICATIONS:

Carrier Tape Type : Conductive.

Cover Tape Type : Antistatic.

Cover Tape Adhesion to Carrier : 10 - 70 grams.

REEL SPECIFICATIONS:

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	one cycle shall consist of : (1) 30 minutes at temperature -30°C. (2) 15 seconds maximum at room ambient. (3) 30 minutes at temperature +85°C. (4) 15 seconds maximum at room ambient. Subject samples to 10 cycles. Test per applicable devices specification after a 4 hours stabilization at room ambient.
2	Vibration	Inductance deviation within $\pm 3.0\%$ after vibration for 1 hour. In each of three orientations at sweep vibration (10~50~10Hz) with 1.5mm P-P amplitude.
3	Solderability	Solder pot at $230^{\circ}\text{C} \pm 5^{\circ}\text{C}$, with kester 1544 solder flux. Dip parts into solder pot containing 63/37 molten alloy for 5 seconds ± 1 second. Wetting must occur on a minimum of 90% of the terminations.
4	Operating Temperature	-25°C ~ +80°C (coil contain heat).
5	Humidity	Inductance deviation within $\pm 5.0\%$. After 96 hour in 90~95% relative humidity at $40 \pm 2^{\circ}\text{C}$ and 1 hour drying under normal condition.
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).