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.

*SIGNAL CONDITIONING. *HYBRIDS. * DC-DC CONVERTORS. *CELLULAR TELEPHONES. *PAGERS. *DC-AC INVERTERS.

*FILTERING.

ELECTRICAL SPECIFICATION:

SMI-40 SERIES				
MODEL	L	DCR	RATED D	
NO.	(uH)	MAX	CURRENT	
		(OHMS)	(mA)	
SMI-40-1R0	1.0	0.04	500	
SMI-40-1R5	1.5	0.06	450	
SMI-40-2R2	2.2	0.07	400	
SMI-40-3R3	3.3	3.3 0.10 300		
SMI-40-4R7	4.7	0.15	250	
SMI-40-6R8	6.8	0.17	220	
SMI-40-100	10	0.24	200	
SMI-40-120	12	0.30	180	
SMI-40-150	15	0.36	160	
SMI-40-180	18	0.41	160	
SMI-40-220	22	0.55		
SMI-40-270	27	0.64	130	
SMI-40-330	33	0.75	100	
SMI-40-390	39	0.83	100	
SMI-40-470	47	1.10	100	
SMI-40-560	56	1.50	80	
SMI-40-680	68	1.60	80	
SMI-40-820	82	2.10	70	
SMI-40-101	100	2.40	70	
SMI-40-121	120	3.20	50	
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	

SMI-50 SERIES				
MODEL	ι	DCR	RATED	
NO.	(uH)	мах	DC	
		(OHMS)	CURRENT	
			(mA)	
SMI-50-3R3	3.3	0.054	500	
SMI-50-4R7	4.7	0.064	500	
SMI-50-6R8	6.8	0.075	500	
SMI-50-8R2	8.2	0.094	450	
SMI-50-100	10	0.12	420	
SMI-50-120	12	0.15	400	
SMI-50-150	15	0.16	400	
SMI-50-220	22	0.22	400	
SMI-50-330	33	0.35	250	
SMI-50-470	47	0.50	250	
SMI-50-560	56	0.60	200	
SMI-50-680	68	0.65	200	
SMI-50-820	82	0.83	160	
SMI-50-101	100	0.90	160	
SMI-50-151	150	1.50	120	
SMI-50-221	220	2.20	100	
SMI-50-331	330	3.20	100	
SMI-50-471	470	4.70	100	
SMI-50-681	680	7.00	50	
SMI-50-102	1000	11.0	40	

PHYSICAL DIMENSION : (UNIT:mm)











 $\begin{array}{l} A:6.9 \pm 0.3 mm \mbox{ FOR 3.3 uH} \sim 47 uH \\ B:1.0 \pm 0.15 mm \\ A:6.3 \pm 0.3 mm \mbox{ FOR 56 uH} \sim 1000 uH \\ B:0.87 \pm 0.15 mm \end{array}$

NOTE(1):TEST FREQUENCY:100KHz,1VRMS. NOTE(2):1.0uH \sim 8.2uH \pm 20%,10uH \sim 1000uH \pm 10%.

SMI-40 SERIES

SMI-50 SERIES

PACKING

Tape and Reel Orientation



USER DIRECTION OF FEED



NOTE : Top view shown with cover tape removed.

MODEL	TAPE WIDTH	REEL WIDTH	COMPONENT PITCH	UNITS PER REEL	
SMI-40 SERIES	12mm	18.4mm	8mm	2500	
SMI-50 SERIES	16mm	22.4mm	8mm	1000	
TAPE SPECIFICAT SMI-40 SERIES	TONS:		SMI-50 SERIES		
Carrier Tape Type : Conductive. Cover Tape Type : Non-antistatic. Cover Tape Adhesion to Carrier : 60 – 175 grams. REFL SPECIEIC ATIONS:		Carrier Tape Type : Conductive. Cover Tape Type : Antistatic. Cover Tape Adhesion to Carrier :10 – 70 grams.			

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 , 15 seconds maximum @ room ambient, 30 minutes @ +125 , 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, 	
3	Solderability	50-500 Hz constant acceleration of 4.2 g's. 10 minutes. Per MIL –STD-202, Method 208, except steam aging is omitted And pads are dipped 30 from vertical. Solder temperature: + 245 ±5 .Immersion dwell time: 5 ±1/2 seconds.	
4	Storage Life	Subject the component to 168 hours at + 85 and 85% relative humidity.	
5	Moisture Resistance	Precondition at + 40for 60 minutes. Subject the componentto 240 hours at + 40and 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).	