



# SH260 Series • Inductors for National's 260kHz Simple Switcher™

Compatible with National Semiconductor's Simple Switcher™  
Part Numbers LM267X-L41 and LM267X-L45 through LM267X-L50

### Features

- High energy storage with minimum saturation
- High stability from no load to full load
- Available in both SMD and THT versions
- Manufactured in ISO-9001:2000, TS-16949:2002 and ISO-14001:2004 certified Talema facility
- Meets lead free reflow level J-STD-020C
- Fully RoHS compliant



### Electrical Specifications @ 25°C

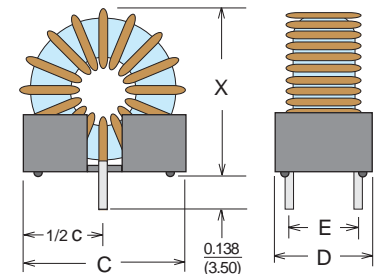
Test voltage between windings: 500 Vrms  
Operating temperature range: -40°C to +125°C  
Climatic Category: IEC68-1 40/125/56  
Test frequency: Inductance measured @ 10kHz / 10mV

Part Number	National Part Number	Rated Current (I <sub>DC</sub> )	Inductance (μH) ±20%	ET <sub>OP</sub> (V-μSec) Max. @ 260kHz	DCR Nominal (mOhm)	Package Size	
						Package Code	Lead Dia. (mm)
SH260C-4.9-23	LM267X-L41	4.9	22.8	23.3	36	C3	0.80
SH260C-4.3-10	LM267X-L45	4.3	10.2	10.0	26	C1	0.75
SH260C-5.0-15	LM267X-L46	5.0	14.8	17.0	23	C2	0.80
SH260C-5.0-10	LM267X-L47	5.0	10	13.0	25	C2	0.75
SH260C-5.0-50	LM267X-L48	5.0	50	40.0	50	C4	0.90
SH260C-5.0-33	LM267X-L49	5.0	33	36.0	47	C4	0.80
SH260C-5.0-23	LM267X-L50	5.0	23	24.0	26	C3	0.80
SH260S-4.9-23	LM267X-L41	4.9	22.8	23.3	36	SH6A	
SH260S-4.3-10	LM267X-L45	4.3	10	10.0	26	S4	
SH260S-5.0-15	LM267X-L46	5.0	15	17.0	27	S5	
SH260S-5.0-10	LM267X-L47	5.0	11	13.0	25	S5	
SH260S-5.0-50	LM267X-L48	5.0	52*	40.0	25	SHC7	
SH260S-5.0-33	LM267X-L49	5.0	36*	36.0	19	SHC7	
SH260S-5.0-23	LM267X-L50	5.0	24.7*	24.0	13	SHC7	
SH260T-4.9-23	LM267X-L41	4.9	22.8	23.3	36	TH6A	
SH260T-4.3-10	LM267X-L45	4.3	10	10.0	26	T4	
SH260T-5.0-15	LM267X-L46	5.0	15	17.0	27	T5	
SH260T-5.0-10	LM267X-L47	5.0	11	13.0	25	T5	

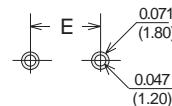
\* Note: Series connection with pins 2 - 4 connected

### Type SW260C - Clip Mount

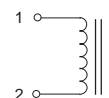
Part Number	Size Code	Dimensions - Inches ±0.01 (mm ±0.25)				
		C	D	E	Coil OD	X = Coil OD +
SH260C-4.3-10	C1	0.580 (14.73)	0.340 (8.64)	0.220 (5.58)	0.605 (15.40)	0.110 (2.80)
SH260C-5.0-15	C2	0.650 (16.50)	0.449 (11.40)	0.299 (7.60)	0.640 (16.26)	0.110 (2.80)
SH260-5.0-10	C2	0.650 (16.50)	0.449 (11.40)	0.299 (7.60)	0.590 (15.00)	0.110 (2.80)
SH260C-4.9-23	C3	0.827 (21.00)	0.449 (11.40)	0.299 (7.60)	0.840 (21.34)	0.110 (2.80)
SH260C-5.0-23						
SH260C-5.0-50	C4	0.949 (24.10)	0.598 (15.20)	0.449 (11.40)	1.240 (31.50)	0.110 (2.80)
SH260C-5.0-33						



Suggested Board Layout (Top Side View)

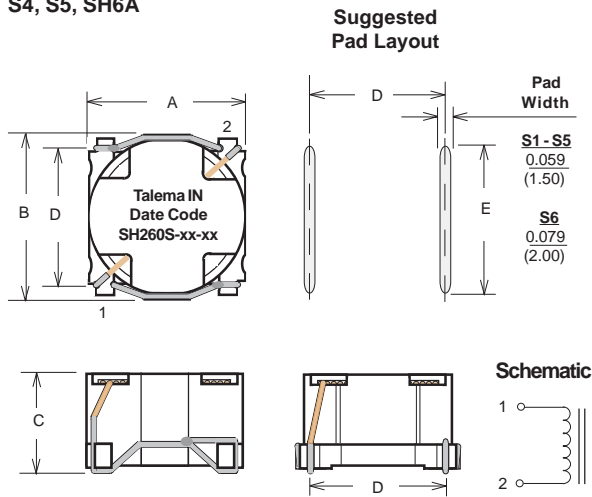


Schematic



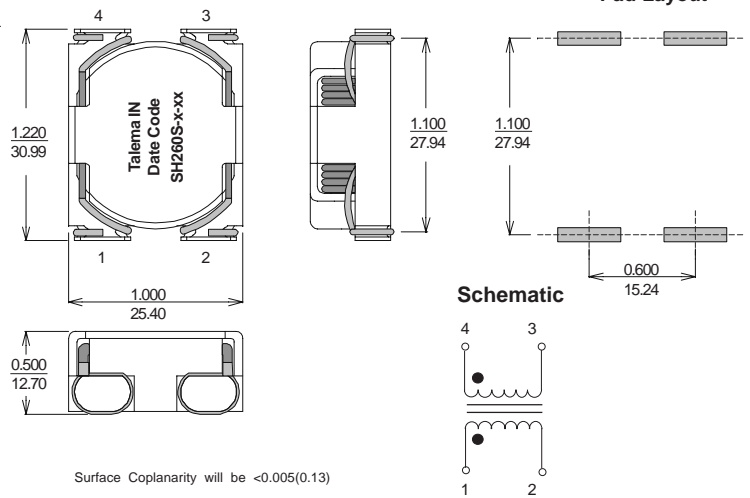
## Mounting Styles • SH260 Series • Low Cost Toroidal Inductors

### S4, S5, SH6A



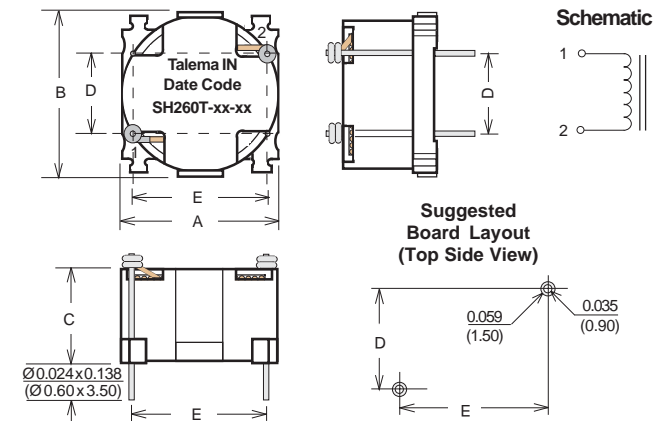
Surface Coplanarity will be <math><0.005(0.13)</math>

### SHC7



Surface Coplanarity will be <math><0.005(0.13)</math>

### T4, T5, TH6A



Mounting Style	Size Code	Dimensions - Inches $\pm 0.010$ (mm $\pm 0.25$ )				
		A	B	C	D	E
"S" SMD	S4	0.591 (15.0)	0.614 (15.6)	0.394 (10.0)	0.508 (12.9)	0.551 (14.0)
	S5	0.669 (17.0)	0.701 (17.8)	0.441 (11.2)	0.591 (15.0)	0.630 (16.0)
	SH6A	0.925 (23.5)	0.957 (24.3)	0.417 (10.6)	0.827 (21.0)	0.748 (19.0)
"T" THT	T4	0.591 (15.0)	0.614 (15.6)	0.358 (9.10)	0.300 (7.62)	0.500 (12.70)
	T5	0.669 (17.0)	0.701 (17.8)	0.409 (10.40)	0.600 (15.24)	0.500 (12.70)
	TH6A	0.925 (23.5)	0.957 (24.3)	0.386 (9.80)	0.650 (16.51)	0.800 (20.32)

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