



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

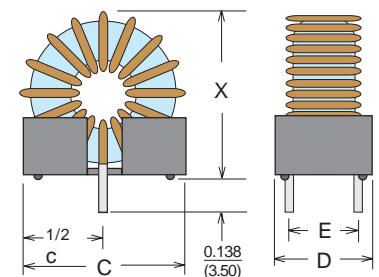
Test frequency: Inductance measured @ 10kHz / 10mV

Part Number	National Part Number	Rated Current (I _{DC})	Inductance (μH) ±20%	ET _{OP} (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	F2	
SH260T-5.0-10	LM267X-L47	5.0	11	13.0	25	F2	

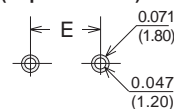
* Note: Series connection with pins 2 - 4 connected

Type SW260C - Clip Mount

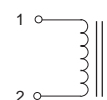
Part Number	Size Code	Dimensions - Inches ±0.01 (mm ±0.25)				
		C	D	E	Coil OD	X = Coil OD +
SH260C-4.3-10	C1	0.580 (14.73)	0.340 (8.64)	0.220 (5.58)	0.605 (15.40)	0.110 (2.80)
SH260C-5.0-15	C2	0.650 (16.50)	0.449 (11.40)	0.299 (7.60)	0.640 (16.26)	0.110 (2.80)
SH260-5.0-10	C2	0.650 (16.50)	0.449 (11.40)	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)

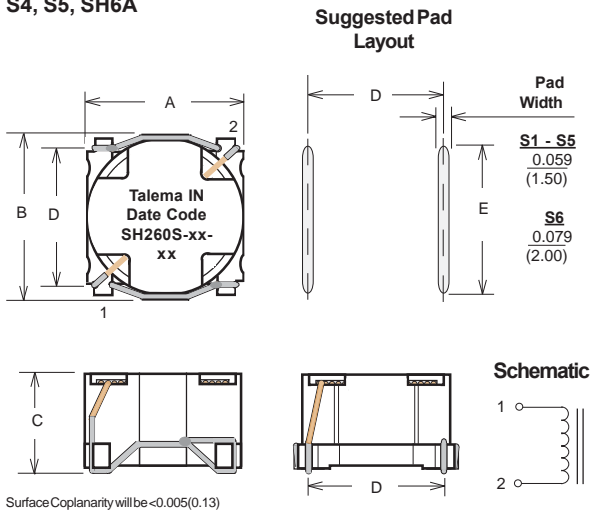


Schematic

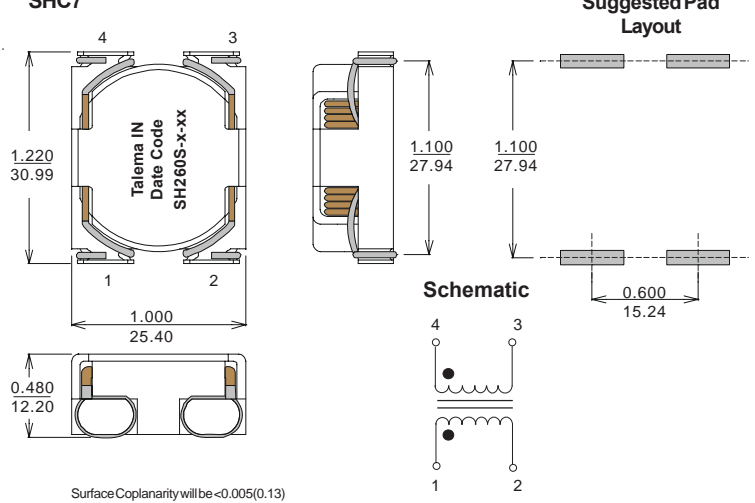


Mounting Styles • SH260 Series • Low Cost Toroidal Inductors

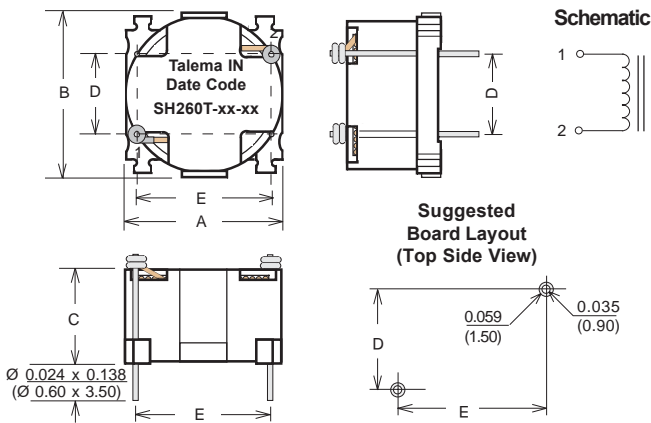
S4, S5, SH6A



SHC7

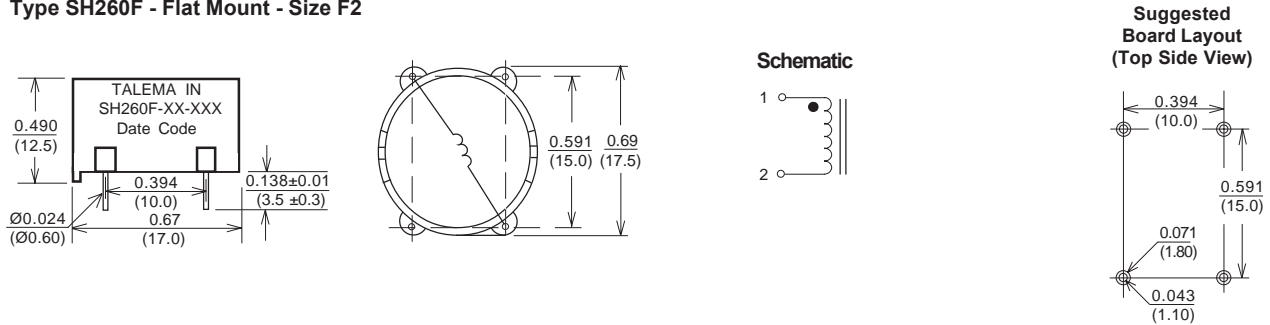


T4 & TH6A



Mounting Style	Size Code	Dimensions - Inches ± 0.010 (mm ± 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)
	TH6A	0.925 (23.5)	0.957 (24.3)	0.386 (9.80)	0.650 (16.51)	0.800 (20.32)

Type SH260F - Flat Mount - Size F2



SH260 Series Cross Reference for National's 260kHz Simple Switcher™

Pulse Part Number		National Part Number	L (μ H) $\pm 20\%$ Clip - SMD	I _{DC} (Amps)	Talema Part Number	
Clip Mount	SMD				Clip Mount (THT)	SMD
P0841	P0841S	LM267X-L41	22.8 - 23	4.9	SH260C-4.9-23	SH260S-4.9-23
P0845	P0845S	LM267X-L45	10.2 - 10	4.3	SH260C-4.3-10	SH260S-4.3-10
P0846	P0846S	LM267X-L46	14.8 - 15	5.0	SH260C-5.0-15	SH260S-5.0-15
P0847	P0847S	LM267X-L47	10 - 11	5.0	SH260C-5.0-10	SH260S-5.0-10
P0848	P0848S	LM267X-L48	50 - 52	5.0	SH260C-5.0-50	SH260S-5.0-50
P0849	P0849S	LM267X-L49	33 - 36	5.0	SH260C-5.0-33	SH260S-5.0-33
P0850	P0850S	LM267X-L50	23 - 24.7	5.0	SH260C-5.0-23	SH260S-5.0-23

THE TALEMA GROUP • Magnetic Components for ISDN / xDSL / LAN Data Communications