

SL Series • Toroidal Power Inductors

Features

- Operating frequency to 1MHz
- High energy storage with minimum saturation
- High stability from no load to full load
- Available in both SMD and TH versions
- Manufactured in ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Meets lead free reflow level J-STD-020C
- Fully RoHS & REACH Compliant



Electrical Specifications @25°C

Test frequency: Inductance measured @10KHz / 10mV

Test voltage between windings: 500Vrms

Operating temperature range: -40°C to +130°C

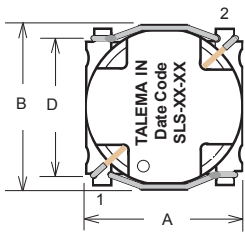
Climatic Category: IEC68-1 40/125/56

Part Number	Rated Current (I _{DC})	L _N (μH) @ I rated ±20%	L _O (μH) No Load ±20%	DCR (mOhms) Nominal	Energy Storage (μJ)	Package	
						"SMD"	"THT"
SL_-3.4-1.01	3.40	1.01	1.10	9.6	6	S1	T1
SL_-1.4-6.2	1.40	6.20	7.00	62.0	6	S1	T1
SL_-1.0-17.6	1.00	17.60	23.96	117.7	9	S1	T1
SL_-4.8-3.8	4.80	3.80	5.20	17.0	44	S2	T2
SL_-2.8-9.4	2.80	9.40	12.20	41.1	37	S2	T2
SL_-1.4-29.7	1.40	29.70	35.30	144.3	29	S2	T2
SL_-0.94-114	0.94	114.00	167.00	411.2	50	S2	T2
SL_-8.0-2.5	8.00	2.50	3.80	7.8	80	S3	T3
SL_-5.4-5.1	5.40	5.10	7.50	17.5	74	S3	T3
SL_-2.7-16.2	2.70	16.20	21.90	68.5	59	S3	T3
SL_-1.3-58.1	1.30	58.10	73.00	288.8	49	S3	T3
SL_-0.9-192	0.90	192.00	292.00	534.7	78	S3	T3
SL_-0.72-383	0.72	383.00	674.00	765.0	99	S3	T3
SL_-7.8-4.9	7.80	4.90	7.90	10.9	149	S4	T4
SL_-5.5-9.0	5.50	9.00	14.00	26.1	136	S4	T4
SL_-2.7-29.1	2.70	29.10	40.50	93.8	106	S4	T4
SL_-0.74-645	0.74	645.00	1134.00	1267.2	177	S4	T4
SL_-14.3-0.81	14.30	0.81	1.25	2.3	83	SH3	--
SL_-11.5-1.32	11.50	1.32	2.10	3.2	87	SH3	--
SL_-13.9-1.68	13.90	1.68	2.80	3.3	162	SH4	--
SL_-11.4-2.5	11.40	2.50	4.20	4.9	162	SH4	--
SL_-7.2-9.3	7.20	9.30	16.00	15.1	241	S5	T5
SL_-5.1-16.1	5.10	16.10	25.90	27.3	209	S5	T5
SL_-2.6-50.0	2.60	50.00	72.90	117.2	169	S5	T5
SL_-0.71-1070	0.71	1070.00	1950.00	1616.1	270	S5	T5
SL_-12.4-3.5	12.40	3.50	6.50	5.9	269	SH5	--
SL_-10.4-4.7	10.40	4.70	8.40	7.1	254	SH5	--
SL_-15.4-5.2	15.40	5.20	10.30	5.5	617	SH6A	TH6A
SL_-10.9-9.4	10.90	9.40	17.60	11.3	558	SH6A	TH6A
Coupled Inductors							
SLC_-1.1-43.6	1.10	43.60	70.30	280.7	26	SC3	TC3
SLC_-2.7-21.9	2.70	21.90	42.90	81.0	80	SC4	--
SLC_-6.4-4.03	6.40	4.03	6.50	19.0	82	SC5	TC5
SLC_-23.8-0.53	23.80	0.53	0.88	1.2	150	SHC4	--
SLC_-21-1.1	21.00	1.10	2.10	2.1	243	SHC5	--
SLC_-22.4-2.1	22.40	2.10	4.00	3.1	527	SHC6	THC6

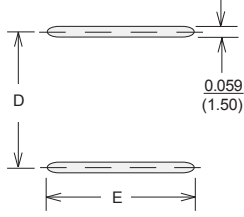
Note: The inductance values listed above are based on a 55°C temperature rise and 25°C ambient temperature.

Mounting Styles • SL Series Toroidal Power Inductors

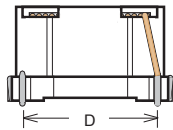
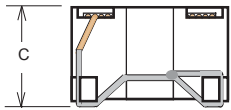
Type S1 - S5



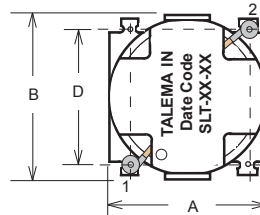
Suggested Pad Layout



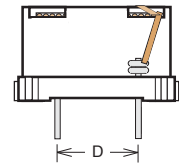
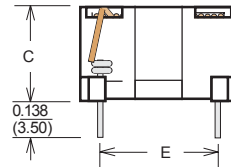
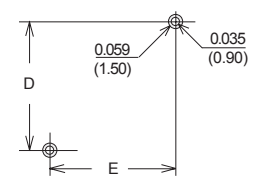
Schematic



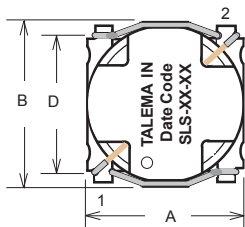
Type T1 - T5



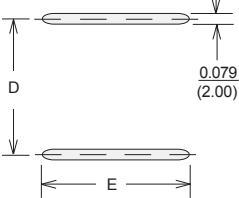
Suggested Board Layout (Top Side View)



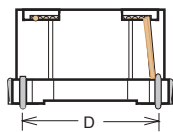
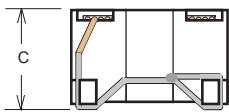
Type SH3 - SH6A



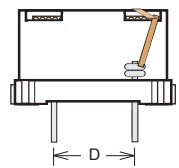
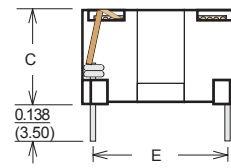
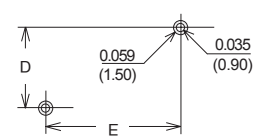
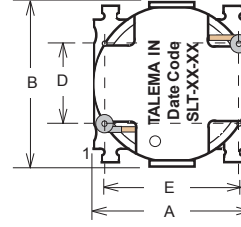
Suggested Pad Layout



Schematic



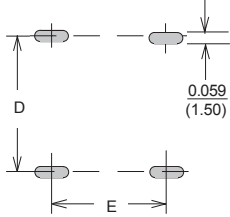
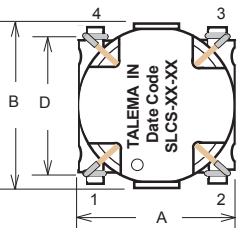
Type TH6A



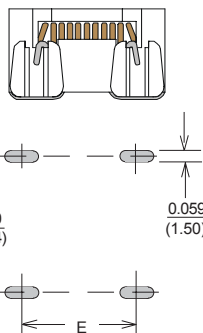
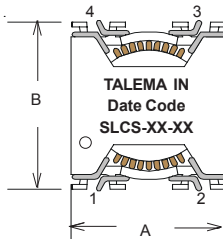
Coupling Transformers

Type SC3 - SC5

Suggested Pad Layout

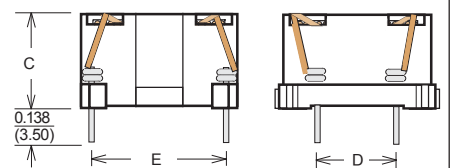
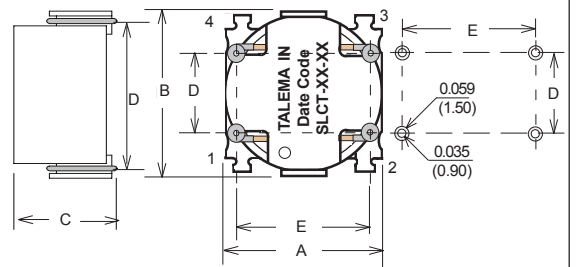


Type SC4

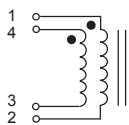


Type TC3 & TC5

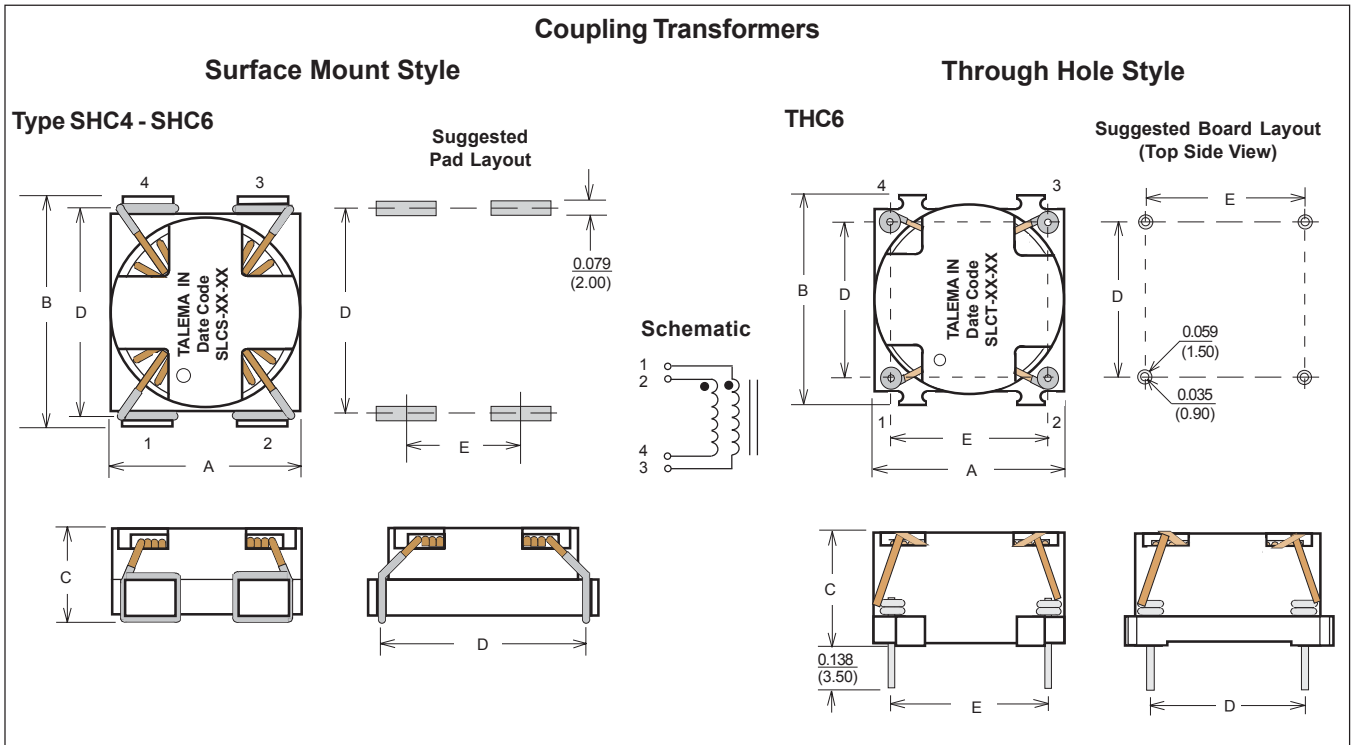
Suggested Pad Layout



Schematic



Mounting Styles • SL Series Toroidal Power Inductors



Note:

When ordering, add "S" or "T" to the basic part number to denote preferred mounting style.

Example: SLS-3.4-1.03 for SMD or SLT-3.4-1.03 for through hole mounting.

Mounting Style	Size Code	Dimensions - Inches ± 0.010 (mm ± 0.25)				
		A	B	C	D	E
"S"	S1	0.339 (8.60)	0.339 (8.60)	0.220 (5.60)	0.268 (6.90)	0.354 (9.00)
	S2	0.433 (11.00)	0.441 (11.20)	0.303 (7.70)	0.358 (9.10)	0.413 (10.50)
	S3	0.551 (14.00)	0.559 (14.20)	0.343 (8.70)	0.461 (11.70)	0.520 (13.20)
	S4	0.591 (15.00)	0.614 (15.60)	0.390 (9.90)	0.508 (12.90)	0.551 (14.00)
	S5	0.669 (17.00)	0.701 (17.80)	0.441 (11.20)	0.591 (15.00)	0.630 (16.00)
"SH"	SH3	0.620 (15.75)	0.605 (15.37)	0.370 (9.40)	0.500 (12.70)	0.500 (12.70)
	SH4	0.670 (17.02)	0.670 (17.02)	0.390 (9.90)	0.560 (14.22)	0.490 (12.45)
	SH5	0.740 (18.80)	0.740 (18.80)	0.390 (9.90)	0.630 (16.00)	0.640 (16.26)
	SH6A	0.925 (23.50)	0.957 (24.30)	0.445 (11.30)	0.843 (21.40)	0.728 (18.50)
"SC"	SC3	0.551 (14.00)	0.630 (16.00)	0.343 (8.70)	0.530 (13.46)	0.348 (8.84)
	SC4	0.590 (14.99)	0.715 (18.16)	0.390 (9.91)	0.600 (15.24)	0.370 (9.40)
	SC5	0.662 (16.82)	0.760 (19.31)	0.413 (10.50)	0.660 (16.76)	0.445 (11.30)
"SHC"	SHC4	0.715 (18.16)	0.865 (21.97)	0.390 (9.91)	0.760 (19.30)	0.360 (9.14)
	SHC5	0.800 (20.32)	0.910 (23.11)	0.390 (9.91)	0.800 (20.32)	0.440 (11.18)
	SHC6	1.000 (25.40)	1.104 (28.05)	0.409 (10.40)	1.010 (25.65)	0.620 (15.75)

Mounting Style	Size Code	Dimensions - Inches ± 0.010 (mm ± 0.25)					Lead \varnothing
		A	B	C	D	E	
"T"	T1	0.339 (8.60)	0.339 (8.60)	0.201 (5.10)	0.250 (6.35)	0.250 (6.35)	0.020 (0.50)
	T2	0.433 (11.00)	0.441 (11.20)	0.280 (7.10)	0.300 (7.62)	0.300 (7.62)	0.020 (0.50)
	T3	0.551 (14.00)	0.559 (14.20)	0.311 (7.90)	0.375 (9.52)	0.375 (9.52)	0.020 (0.50)
	T4	0.591 (15.00)	0.614 (15.60)	0.358 (9.10)	0.300 (7.62)	0.500 (12.70)	0.022 (0.55)
	T5	0.669 (17.00)	0.701 (17.80)	0.409 (10.40)	0.600 (15.24)	0.500 (12.70)	.026 (0.65)
"TH"	--	--	--	--	--	--	--
	--	--	--	--	--	--	--
	--	--	--	--	--	--	--
	TH6A	0.925 (23.50)	0.957 (24.30)	0.386 (9.80)	0.650 (16.51)	0.800 (20.32)	0.031 (0.80)
"TC"	TC3	0.551 (14.00)	0.630 (16.00)	0.327 (8.30)	0.500 (12.70)	0.400 (10.16)	0.024 (0.60)
	--	--	--	--	--	--	--
	TC5	0.662 (16.82)	0.760 (19.31)	0.362 (9.20)	0.500 (12.70)	0.500 (12.70)	0.024 (0.60)
"THC"	--	--	--	--	--	--	--
	THC6	1.000 (25.40)	1.104 (28.05)	0.357 (9.08)	1.000 (25.40)	0.600 (15.24)	0.028 (0.70)

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Locations of Talema Group Regional Offices

