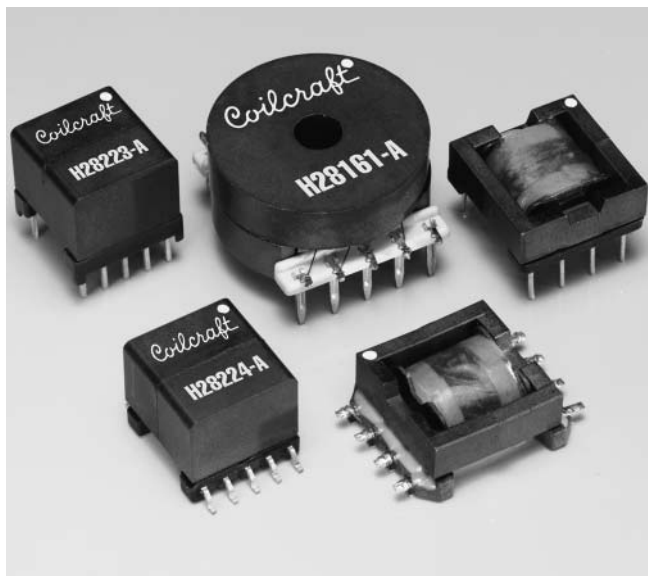


HDSL2 Transformers



This product is not RoHS-compliant. Contact Coilcraft for current status or possible alternatives.

This family of transformers provides optimum performance with the Level One SK70740/-41/-42 and other HDSL2 transceiver chip sets. The series now includes parts with a 1 CT to 2.3 CTS turns ratio, allowing them to work with line drivers for lower power supply voltages.

They're engineered for minimum DC resistance and very low leakage inductance. Primary inductance with and without DC bias is stable from -40°C to +85°C. The return loss, longitudinal balance and THD are optimized for the best overall performance at the HDSL2 transmission speed.

For free evaluation samples or to discuss custom designs, please contact Coilcraft.

Part number	Style	Data rate (kb/s)	Turns ratio chip:line	Primary inductance $\pm 15\%$ (mH)	Leakage inductance max (μ H)	Capacitance max (pF)	DCR max (Ohms)	
							Chip side	Line side
H28161-A	Leaded	1500	1 CT:2.3 CTS	2.0	25	90	1.5 (9-7)	1.5 (1-4), 1.5 (2-5)
H28159-A	Leaded	1500	1 CT:2.3 CTS	2.0	30	55	2.0 (8-6)	2.0 (1-2), 2.0 (3-4)
H28160-A	SMT	1500	1 CT:2.3 CTS	2.0	30	55	2.0 (8-6)	2.0 (1-2), 2.0 (3-4)
H27649-B	Leaded	1500	1 CT:2 CTS	2.0	25	90	1.5 (9-7)	1.5 (1-4), 1.5 (2-5)
H27650-A	Leaded	1500	1 CT:2 CTS	2.0	25	55	2.0 (8-6)	2.0 (1-2), 2.0 (3-4)
H27695-A	SMT	1500	1 CT:2 CTS	2.0	25	55	2.0 (8-6)	2.0 (1-2), 2.0 (3-4)
H28223-B	Leaded	1500	1 CT:2.3 CTS	2.0	30	65	1.85 (10-7)	2.1 (1-4), 2.1 (2-5)
H28224-B	SMT	1500	1 CT:2.3 CTS	2.0	30	65	1.85 (10-7)	2.1 (1-4), 2.1 (2-5)

Part number	DC bias capacity (mA)	Dielectric strength (V)	Return loss		Longitudinal balance typ (dB)	THD typ (dB)
			min (dB)	min (dB)		
H28161-A	100	2300	13 @ 40 kHz	13 @ 320 kHz	65 @ 40 kHz	-85 @ 20 kHz
H28159-A	100	3000	13 @ 40 kHz	12 @ 320 kHz	65 @ 40 kHz	-85 @ 20 kHz
H28160-A	100	3000	13 @ 40 kHz	12 @ 320 kHz	65 @ 40 kHz	-85 @ 20 kHz
H27649-B	100	2300	14 @ 40 kHz	15 @ 320 kHz	65 @ 40 kHz	-85 @ 20 kHz
H27650-A	100	3000	14 @ 40 kHz	13 @ 320 kHz	65 @ 40 kHz	-85 @ 20 kHz
H27695-A	100	3000	14 @ 40 kHz	13 @ 320 kHz	65 @ 40 kHz	-85 @ 20 kHz
H28223-B	100	3000	13 @ 40 kHz	13 @ 320 kHz	65 @ 40 kHz	-85 @ 20 kHz
H28224-B	100	2300	13 @ 40 kHz	13 @ 320 kHz	65 @ 40 kHz	-85 @ 20 kHz

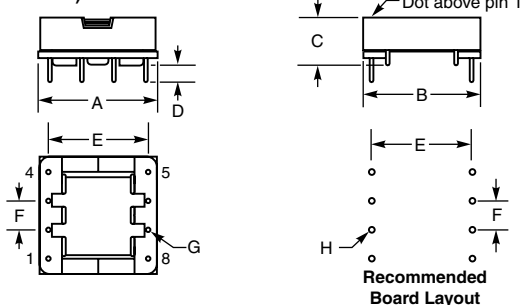
1. All electrical specifications referenced to line side.
2. Operating temperature range -40°C to +85°C.
3. Electrical specifications at 25°C.

Specifications subject to change without notice.
Please check our website for latest information. Document 202-1 Revised 02/11/08

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HDSL2 Transformers

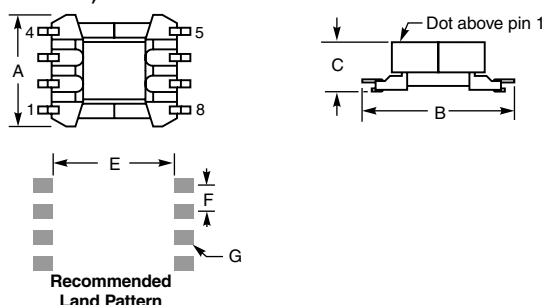
H27650-A, H28159-A



Packaged 100 per tray

A max	B max	C max	D min	E	F typ	G dia	H dia
0.650	0.675	0.35	0.125	0.541	0.148	0.020	0.030
16,51	17,15	8,9	3,19	13,74	3,76	0,51	0,76

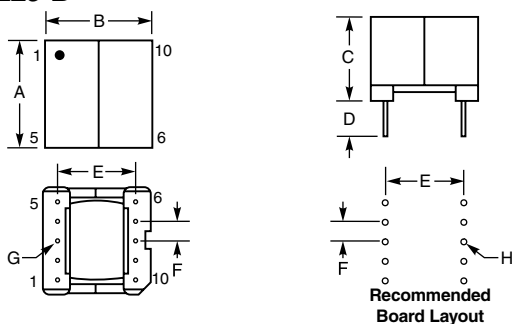
H27695-A, H28160-A



Packaged 60 per tray

A max	B max	C max	E	F typ	G typ
0.675	0.925	0.35	0.591	0.148	0.079 × 0.110
17,14	23,50	8,9	15,01	3,76	2,01 × 2,79

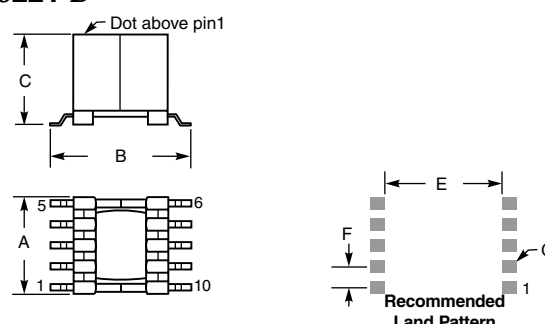
H28223-B



Packaged 50 per tray

A max	B max	C max	D min	E	F typ	G dia	H dia
0.550	0.550	0.500	0.100	0.400	0.100	0.013	0.032
3,97	13,97	12,70	3,0	10,16	2,54	0,33	0,82

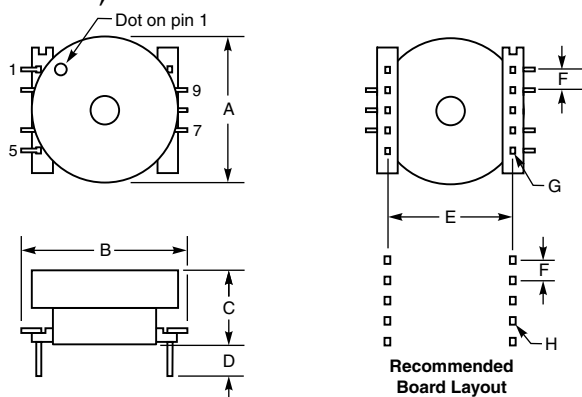
H28224-B



Packaged 100 per tray

A max	B max	C max	E	F typ	G typ
0.530	0.699	0.500	0.590	0.098	0.050 × 0.061
13,46	17,75	12,70	14,99	2,50	1,27 × 1,55

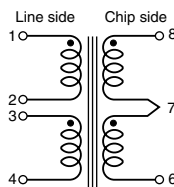
H27649-B, H28161-A



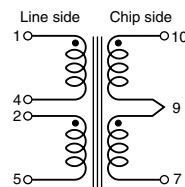
Packaged 49 per tray

A max	B max	C max	D min	E	F typ	G typ	H typ
0.930	1.05	0.46	0.12	0.800	0.150	0.017 × 0.038	0.045 × 0.025
23,62	26,7	11,7	3,0	20,32	3,81	0,43 × 0,97	1,14 × 0,64

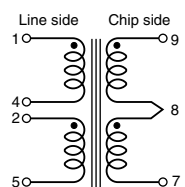
H27650-A, H28159-A, H27695-A, H28160-A



H28223-B, H28224-B



H27649-B, H28161-A



Specifications subject to change without notice. Please check our website for latest information. Document 202-2 Revised 02/11/08