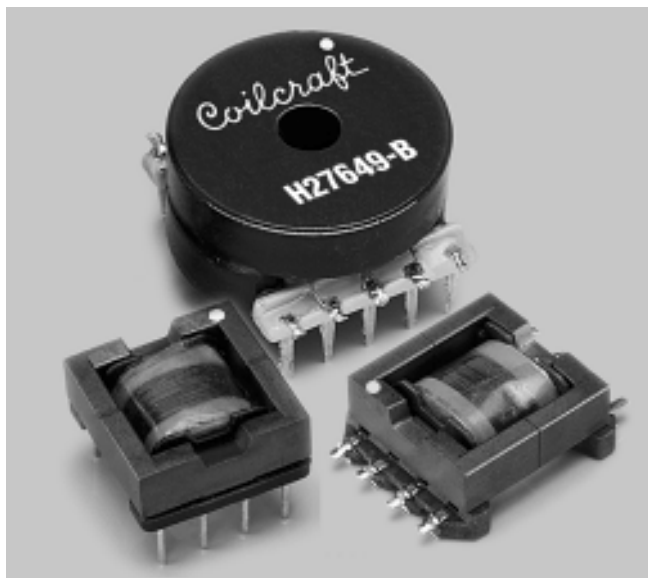


HDSL2 Transformers



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.

The H28159/H27650 and surface mount H28160/H27695 transformers are among the smallest available. Both are designed to meet UL 1459 and UL 1950 requirements.

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

SPECIFICATIONS

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

Part number	DC bias capacity (mA)	Dielectric strength (V)	Return loss (dB) min		Longitudinal balance (dB) typ	THD (dB) typ
			(dB) min	(dB) min		
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

1. All electrical specifications referenced to line side.

2. Operating temperature range -40° C to +85° C.

3. Electrical specifications at 25° C.

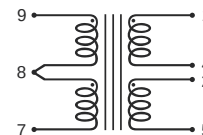
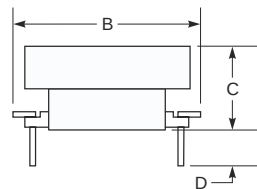
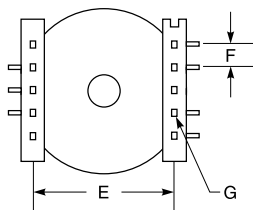
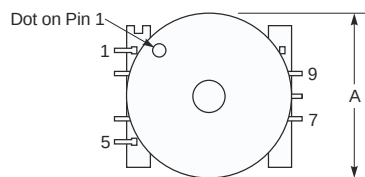
Specifications subject to change without notice. Document 202-1 Revised 7/6/99

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NEW!

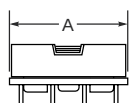
HDSL2 Transformers

H27649-B, H28161-A

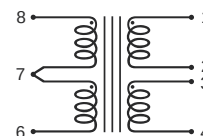
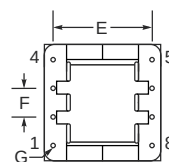
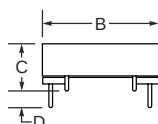


A max	B max	C max	D min	E	F typ	G typ
.950	1.05	.46	.12	.800	.150	.045 x .025
24,13	26,7	11,7	3,0	20,32	3,81	1,14 x 0,64

H27650-A, H28159-A

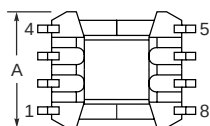


Dot above Pin 1

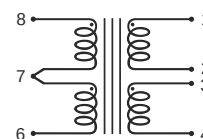
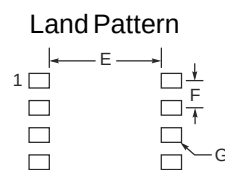
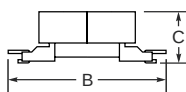


A max	B max	C max	D min	E	F typ	G typ
.650	.675	.35	.125	.541	.148	.030
16,51	17,15	8,9	3,19	13,74	3,76	0,76

H27695-A, H28160-A



Dot above Pin 1



A max	B max	C max	E	F typ	G typ
.650	.675	.35	.591	.148	.079 x .110
16,51	17,15	8,9	15,01	3,76	2,01 x 2,79

Coilcraft

Specifications subject to change without notice. Document 202-2 Revised 7/6/99

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