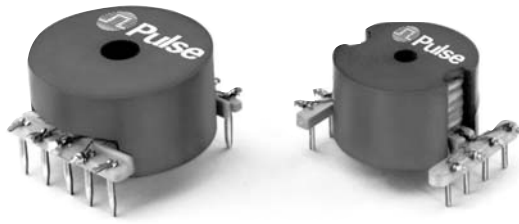






ISDN U-INTERFACE TRANSFORMERS

For Applications with 2B1Q and 4B3T Coding



-  Matched to leading transceiver ICs
-  Parts meet ANSI T1.601-1992 and ETSI ETR 080
-  Transformer models with 2000Vrms to 3000Vrms minimum isolation
-  UL recognized

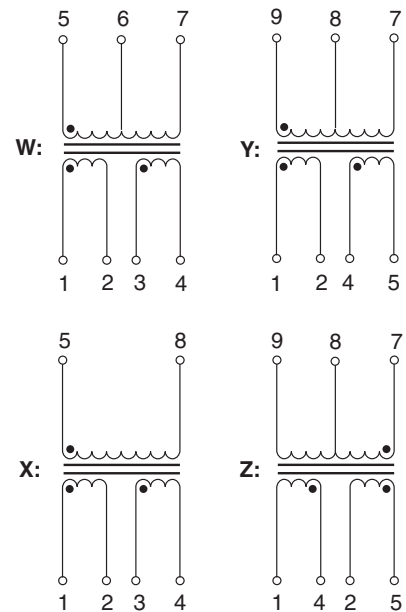
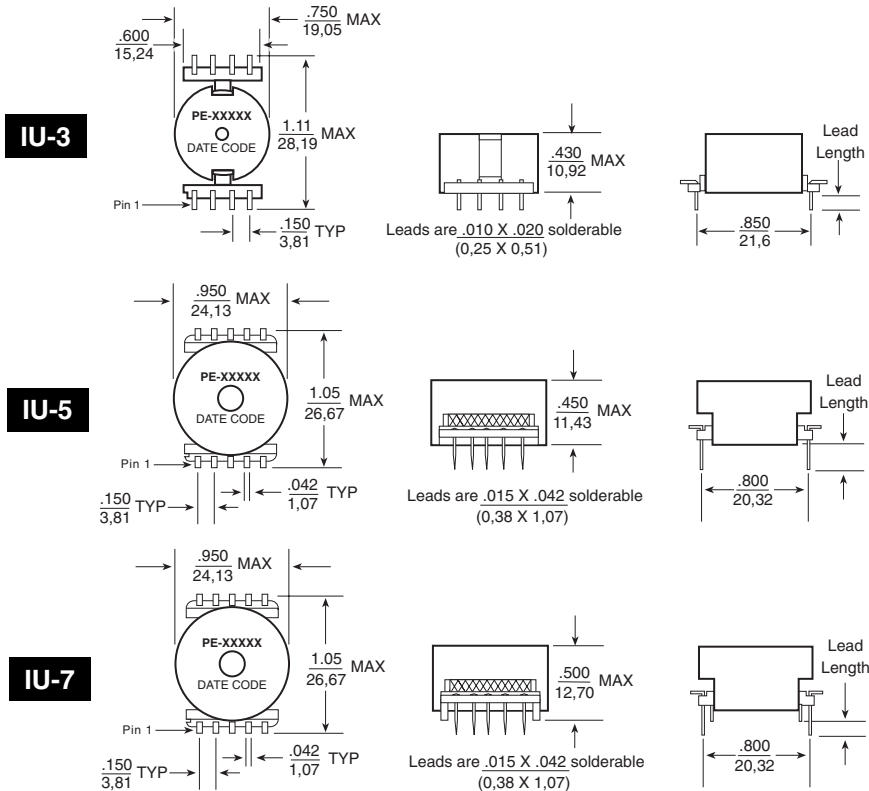
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

Isolation Voltage (Vrms MIN)	Part Number	Turns Ratio Line:Chip (±3%)	Line Side Pins	OCL Line side (mH)	DCR Line Side (Ω)	DCR Chip Side (Ω)	IDC (mA)	Lead Length	Package/Schematic
2000 Vrms	PE-65575*	1.65:1	(1-4)	13.0-18.0	5.2 ±15%	3.0 ±15%	50	0.15 ± 0.03 (3,81 ± 0,76)	IU-3/W ⁴
	PE-65578	1.32:1	(1-4)	7.0-8.3	2.4 MAX	2.7 MAX	55	0.15 ± 0.03 (3,81 ± 0,76)	IU-3/X
	PE-65579	2.00:1	(1-5)	25.5-28.5	11.6 MAX	6.4 MAX	60	0.17 ± 0.04 (4,32 ± 1,02)	IU-5/Y
	PE-65581	1.50:1	(4-2)	14.2-15.8	16.0 MAX	2.5 MAX	60	0.17 ± 0.04 (4,32 ± 1,02)	IU-5/Z
	PE-65583	1.50:1	(4-2)	25.6-29.0	20.0 MAX	3.0 MAX	60	0.16 ± 0.03 (4,06 ± 0,76)	IU-5/Z ²
	PE-65584	1.50:1	(1-5)	25.6-29.0	20.0 MAX	3.0 MAX	60	0.17 ± 0.04 (4,32 ± 1,02)	IU-5/Y ²
2500 Vrms	PE-68628*	1.25:1	(1-5)	26.5-29.5	12.0 MAX	7.0 MAX	80	0.16 ± 0.03 (4,06 ± 0,76)	IU-5/Y ²
	PE-68631	1.50:1	(4-2)	25.6-29.0	20.0 MAX	3.0 MAX	60	0.13 ± 0.03 (3,30 ± 0,76)	IU-7/Z ²
	PE-68681	1.50:1	(1-5)	25.6-28.4	20.0 MAX	3.0 MAX	60	0.13 ± 0.03 (3,30 ± 0,76)	IU-7/Y ²
3000Vrms	PE-68668*	1.25:1	(1-5)	26.5-29.5	13.0 MAX	7.5 MAX	80	0.13 ± 0.03 (3,30 ± 0,76)	IU-7/Y ²
	PE-68669*	1.65:1	(1-4)	13.0-18.0	5.2 ±15%	3.0 ±15%	50	0.13 ± 0.03 (3,30 ± 0,76)	IU-3/W

NOTE: For surface mount versions of these parts, please see data sheet T614. New small surface mount package available. Contact Pulse Application Engineering at (619) 674-8100 for more information. *Operating temperature range: -40°C to 85°C.

Mechanicals

Schematics



Dimensions: $\frac{\text{Inches}}{\text{mm}}$
 Unless otherwise specified,
 all tolerances are $\pm \frac{.010}{0,25}$

USA 858 674 8100 • Germany 49 7032 7806 0 • Singapore 65 6287 8998 • Shanghai 86 21 54643211 / 2 • China 86 755 33966678 • Taiwan 886 3 4641811

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ISDN U-INTERFACE TRANSFORMERS

For Applications with 2B1Q and 4B3T Coding



Additional Specifications

Return Loss (2B1Q) (10 and 25Hz)	Longitudinal Balance (2B1Q)		Longitudinal Balance (4B3T)		Surge Voltage Resistability (ALL)	
20dB MIN	28Hz to 40kHz	55dB MIN	5kHz	20dB MIN	Metallic @ 800V Peak	10/700µsec
—	Above 40kHz	-20dB/decade	20kHz-150kHz	40dB MIN	Long. @ 2400V Peak	10/560µsec
—	—	—	1MHz	36dB MIN	—	—

Transformer Selection

Company	Chip	Coding	Transformer 2000Vrms Isolation	Transformer High Isolation Models
Motorola	MC145472	2B1Q	PE-65579	—
Motorola	MC145572	2B1Q	PE-68628	PE-68668
National	TP 3410	2B1Q	PE-65583 ⁽¹⁾	PE-68631
			PE-65584 ⁽¹⁾	PE-68681
Siemens	PEB 2091	2B1Q	PE-65575 ⁽⁴⁾	PE-68669
Siemens	PEB 2090 PEB 20901	4B3T	PE-65578	—
Thomson	SD 5411	2B1Q	PE-65581	—

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