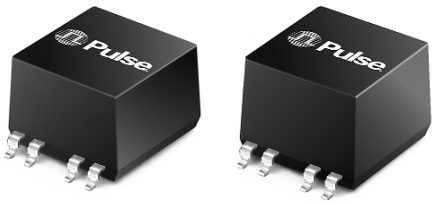
ISDN S-INTERFACE TRANSFORMERS
Surface Mount, Single, 1.5 and 3KVrms



- Meets the pulse waveform template of CCITT I.430, using recommended transformer and chip pair
- Compact SMT transfer-molded package with 1.5KV and 3KV compatible footprints
- Options for Terminal, Line Card and NT Box Applications

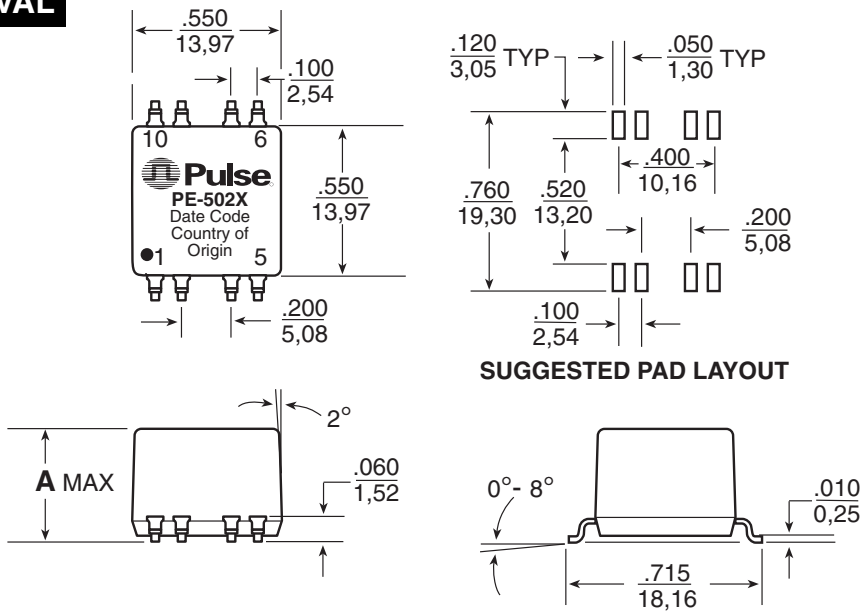
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

Part Number	Ratio Pri:Sec (± 2%)	OCL Pri (mH MIN)	LL Sec (µH MAX)	Cw/w (pF MAX)	CD Pri (pF MAX)	DCR Pri (Ω MAX)	DCR Sec (Ω MAX)	Δ IDC (mA MAX)	Isolation Voltage (Vrms MIN)	Primary Pins	Package / Schematic
T5020	1:2	22	5	120	180	2.5	5.2	3	1500	1-10, 5-6	VAL 1/B
T5021	1:1	22	5	120	180	2.5	2.5	3	1500	1-10, 5-6	VAL 1/C
T5022	1:2.5	22	10	150	180	2.5	6	3	1500	1-10, 5-6	VAL 1/C
T5023	1:2	22	5	120	180	2.5	5	3	1500	1-10, 5-6	VAL 1/C
T5033	1:2	22	15	120	180	1.3	3.0	3	1500	6-7,9-10	VAL 1/A
T5024	1:2	22	15	45	100	1.3	3.0	3	3000	6-7, 9-10	VAL 2/A
T5025	1:1	22	15	45	100	1.3	1.3	3	3000	6-7, 9-10	VAL 2/A
T5026	1:2.5	22	15	45	100	1.3	3.5	3	3000	6-7, 9-10	VAL 2/A
T5036	1:2	22	15	45	100	1.3	3.0	5	3000	6-7,9-10	VAL 2/A

Note: See table for package heights (1 and 2).

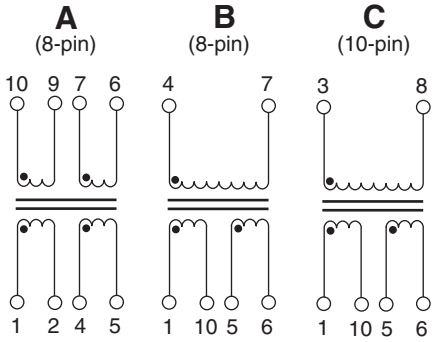
Mechanical

VAL



Dimensions: Inches / mm Unless otherwise specified, all tolerances are ± .010 / 0,25

Schematic



Package Type	Package Height (A MAX)
VAL 1	.394/10,00 MAX
VAL 2	.429/10,88 MAX

NOTE: Optional tape and reel packaging can be ordered by adding a "**T**" suffix to the part number (ie:T5020**T**).

USA 858 674 8100 • UK 44 1483 401 700 • France 33 3 84 35 04 04 • Singapore 65 6287 8998 • Shanghai 86 21 32181071 • China 86 769 5538070 • Taiwan 886 2 26980228

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Pulse® A TECHNITROL COMPANY

Transformer Selection Guide

IC Manufacturer	IC Part Number	Pulse Part Number Transmit & Receive 1.5KV*	Pulse Part Number Transmit & Receive 3KV*
AMD	AM 79C30A	T5020/T5023/T5033	T5024/T5036
Lucent	T7250/ T7252/ T7256	T5022	T5026
	T7259/ T7903/ T7234	T5020/T5023/T5033	T5024/T5036
Mietec	MTC-2072	T5020/T5023/T5033	T5024/T5036
Mitel	MT8930	T5020/T5023/T5033	T5024/T5036
Motorola	MC145474/ 145475	T5021	T5025
	MC145574	T5022	T5026
National	TP3420 / 3421	T5020/T5023/T5033	T5024/T5036
NEC	D98201	T5020/T5023/T5033	T5024/T5036
Siemens	PEB 2080/ 2081 / 2085	T5020/T5023/T5033	T5024/T5036
	PEB 2084/ 2086 / PSB 2186		
	PEB 8091/ 8191		
SGS Thomson	ST5420/ 5421	T5020/T5023/T5033	T5024/T5036
VLSI	VN580060	T5020/T5023/T5033	T5024/T5036
Yamaha	YM 7405B	T5020/T5023/T5033	T5024/T5036

***NOTE:** Choice of Transformer depends upon application:

1.5KV Options:
T5020 AND T5023 offer 8 and 10 pin variations
T5033 has compatible footprint to 3 KV transformers

3KV Options:
T5024 is suitable for Terminal and Line Card Applications
T5036 is suitable for NT Applications due to 5mA ΔIdc

Packaging Information

Package	Part Weight	Parts/Tube	Parts/Reel	Reel Diameter	Tape Width	Pitch
VAL1	4.7 grams	35	150	13"	32mm	24mm
VAL2	5.0 grams	35	150	13"	32mm	24mm

SMT Common Mode Chokes

Part Number	Number of Lines	Inductance	Peak Common Mode Attenuation	Application	Isolation Voltage (MAX)	DCR (Ω MAX)	Data Sheet
LOW FREQUENCY CHOKES							
PE-65853	4-Line	4.7mH ±30%	1MHz	Improve Balance	500Vrms	1.20	G002
HIGH FREQUENCY CHOKES							
PE-65854	4-Line	47µH Min	30MHz	EMI Reduction	500Vrms	0.38	G002
PE-65857	4-Line	22.5µH Min	50MHz	EMI Reduction	500Vrms	0.22	G002
PE-68624	2-Line	47µH Min	30MHz	EMI Reduction	500Vrms	0.40	G002

NOTE: The "High Frequency" 4-wire common mode chokes provide an effective means of compliance with national and international regulations on EMI. They are designed to be used in conjunction with Pulse's ISDN S-Interface transformers. A high inductance "Low Frequency" common mode choke is recommended to improve balance or to correct inherent unbalances of some ISDN S-Interface circuits.

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