

6 Pin SOIC Package

SIDACtor[®]
Solid State Overvoltage Protection

**Preliminary
Multi-port
Line Protector
Pxxx4U_**

Features

- Integrated multi-chip packaging equivalent to four discrete components
- Reduced component count for improved placement costs and PCB utilization
- 500A surge current rating meets all GR1089 and FCC Part 68 surge immunity requirements
- Meets UL and IEC 60950 creepage and clearance requirements
- Utilizes patented ion implant technology (US Patent 5,479,031) for peerless performance
- Glass passivated for superior reliability

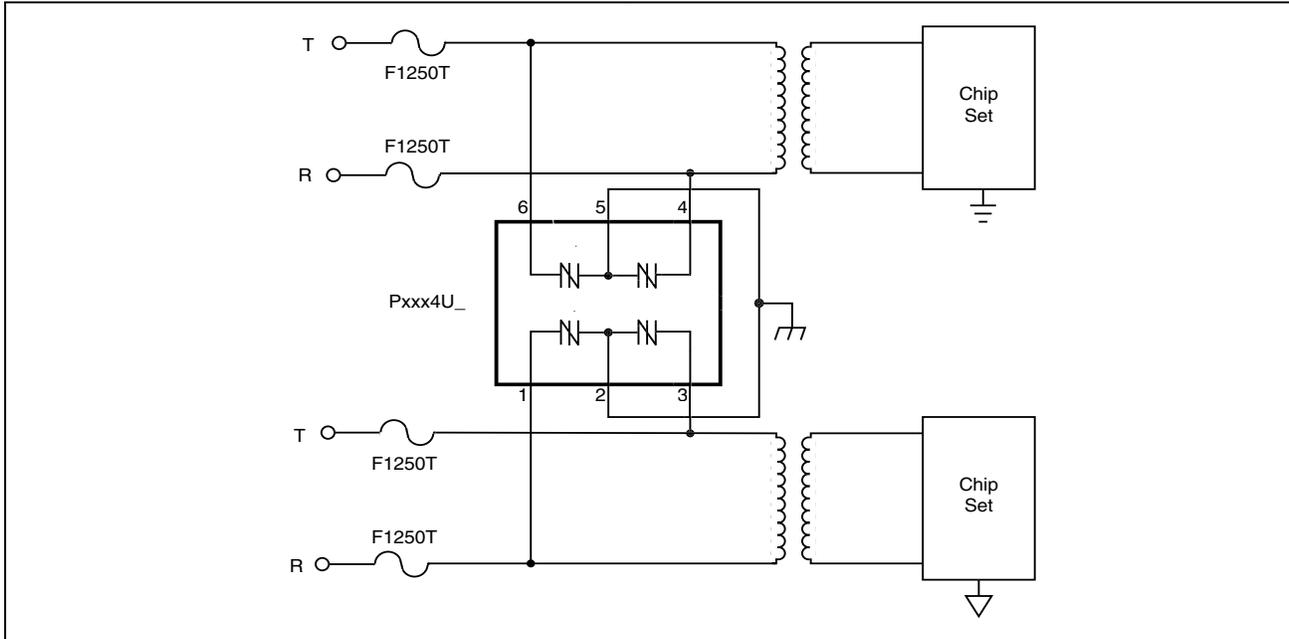


Description

Teccor's new multi-port line protector is designed to offer Teccor customers an integrated multi-chip solution for protecting multiple twisted pair from over voltage conditions. Based on a 6-pin SOIC package, Teccor's multi-port line protector is equivalent to four discrete DO-214AA or two TO-220 packages. Available in surge current ratings of up to 500A, the multi-port line protector is ideal for densely populated, high-speed line cards that can not afford PCB inefficiencies or the utilization of series power resistors.

Available in standard or custom voltage configurations, Teccor's multi-port line protector can help provide a simple solution for complex regulatory requirements.

Example Circuit



Electrical Specifications

Pxxx4U_

Part Number	V _{DRM} Volts	V _S Volts	V _T Volts	I _{DRM} μ Amps	I _S mAmps	I _T Amps	I _H mAmps	C _O pF
P0304U_	25	40	5	5	800	1	50	110
P0644U_	58	77	5	5	800	1	120	50
P0724U_	65	95	5	5	800	1	120	50
P1104U_	90	130	5	5	800	1	120	40
P1304U_	120	160	5	5	800	1	120	40
P1504U_	140	180	5	5	800	1	120	40
P1804U_	170	220	5	5	800	1	120	40
P2304U_	190	250	5	5	800	1	120	30
P2604U_	220	300	5	5	800	1	120	30
P3104U_	275	350	5	5	800	1	120	30
P3504U_	320	400	5	5	800	1	120	30

Notes:

- V_{DRM} and V_S ratings are from pins 1-2, 3-2 and 4-5, 6-5; pins 1-3 and 4-6 are two times the listed value
- V_{DRM} is measured at I_{DRM} and V_S is measured at 100V/ μ s
- Isolation between opposing pins (e.g. 1 to 6) is $\geq 1600V_{RMS}$
- Special voltage ratings (V_S & V_{DRM}), configurations, and holding currents (I_H) are available upon request
- Thermal resistance: junction to ambient is 85°C/W
- C_O is for A and B rated components. C_O for C rated components is 2x listed value

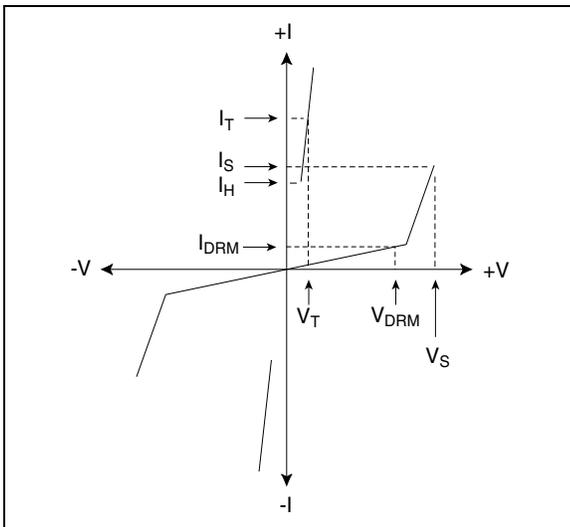
Surge Ratings

Series	I _{PP} 2x10μs Amps	I _{PP} 8x20μs Amps	I _{PP} 10x160μs Amps	I _{PP} 10x560μs Amps	I _{PP} 10x1000μs Amps	I _{TSM} 60Hz Amps	di/dt Amps/μs
A	200	150	100	60	50	20	500
B	250	250	150	100	80	30	500
C	500	400	200	150	100	50	500

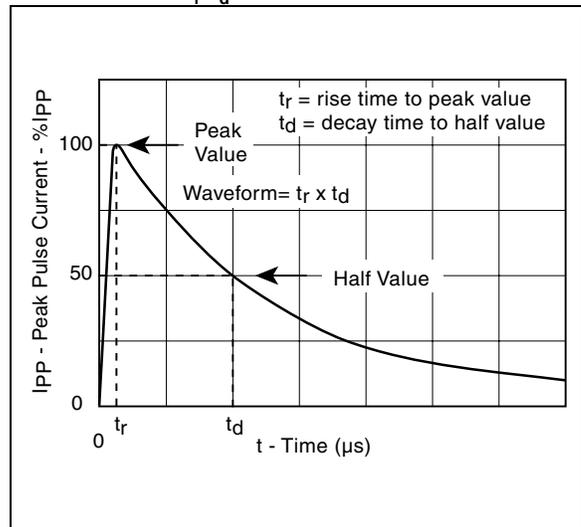
Notes:

- Surge ratings apply from -40°C to +80°C
- Surge ratings are repetitive and are guaranteed for the life of the product

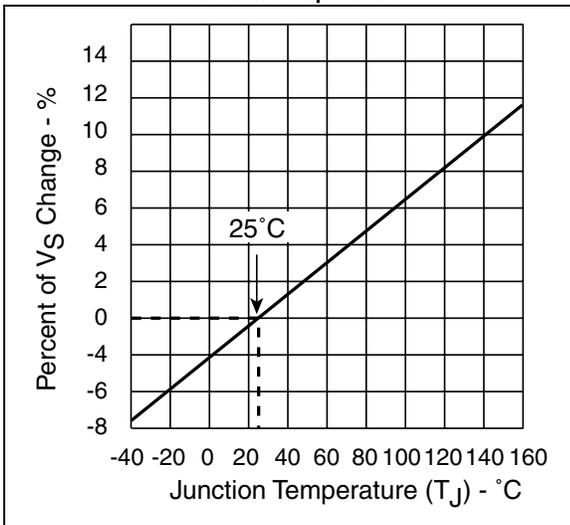
V-I Characteristics



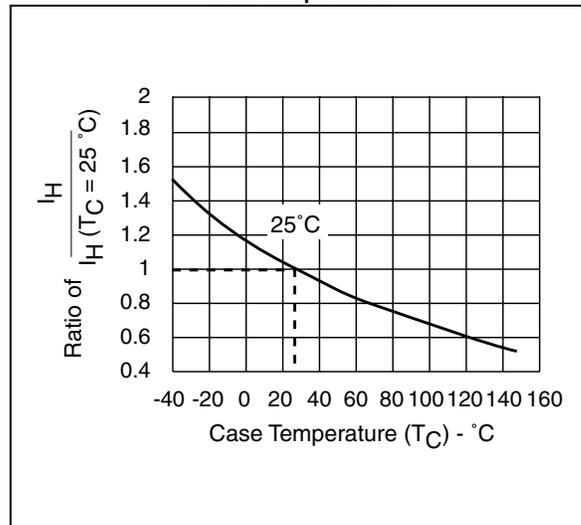
t_r, t_d Pulse Wave-form



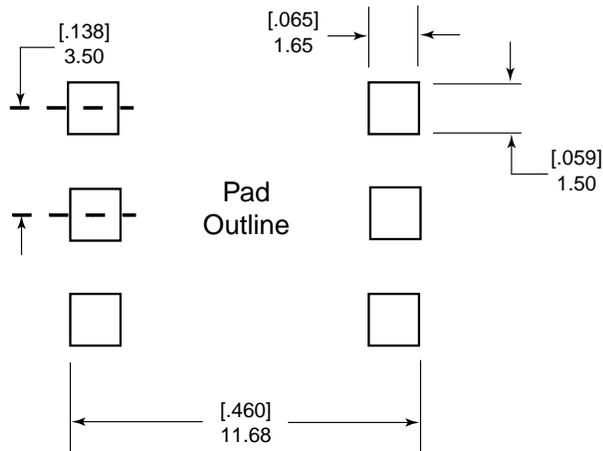
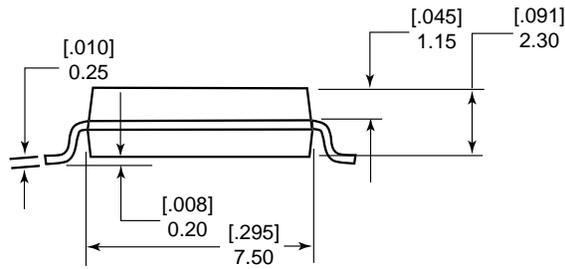
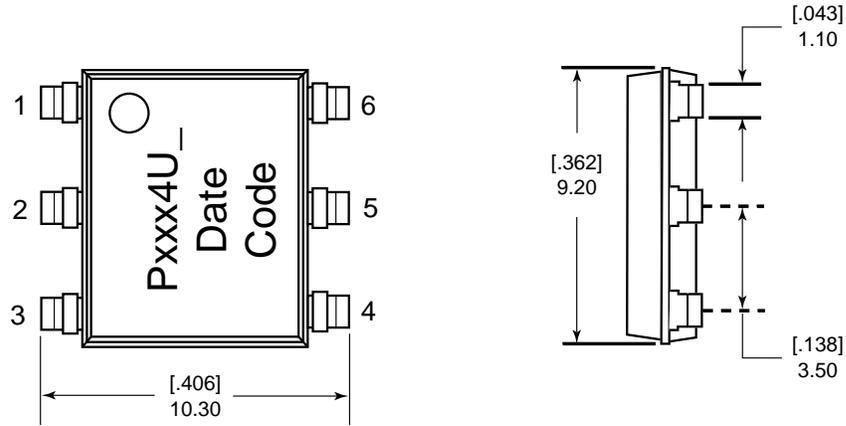
Normalized V_S Change vs. Junction Temperature



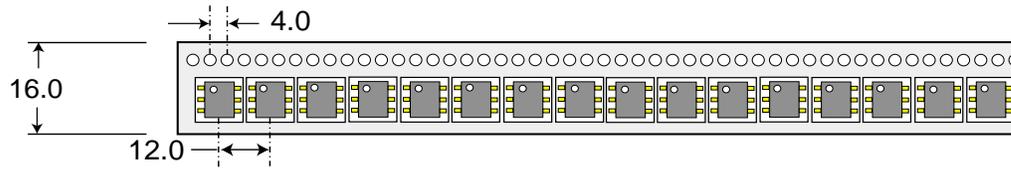
Normalized DC Holding Current vs. Case Temperature



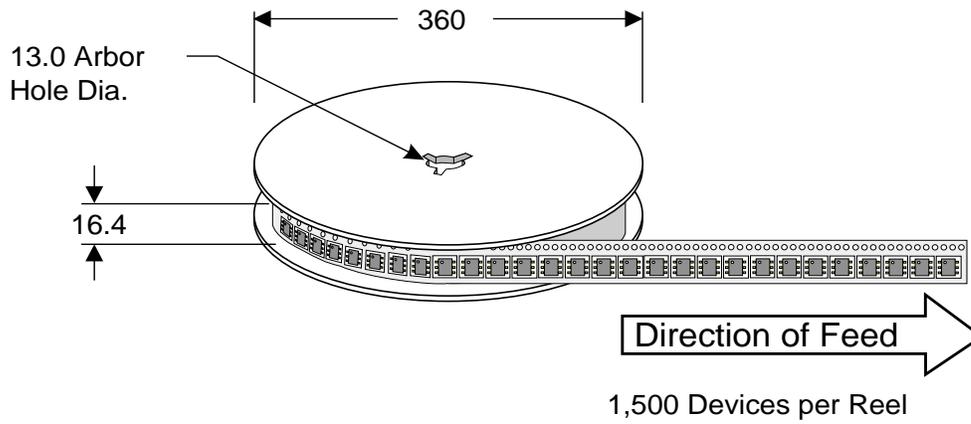
Package and Layout Dimensions



Tape and Reel Packing Specifications



Dimensions
are in mm



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- 4,905,119 - 5,479,031 - 5,516,705

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