

THYRISTOR SURGE SUPPRESSOR
APPLICATIONS

- ✓ SLIC Line Card
- ✓ DBX Branch Exchange Switches
- ✓ FCC Part 68 Customer Premise Equipment
- ✓ Line Interface Modem
- ✓ ISDN Architecture Interface

IEC COMPATIBILITY (EN61000-4)

- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 8/20 μ s - 95A, L4(Line-Gnd), 48A, L4(Line-Line) & 83A, L2(Power)

FEATURES

- ✓ *Complies with: FCC Part 68, UL 1459, Bellcore 1089, ITU-K.20 & K.21*
- ✓ Peak Off-State Voltage 80 Volts
- ✓ Surge Current Capability (See Table 1)
- ✓ ESD Protection > 40 kilovolts
- ✓ Unidirectional Configurations

MECHANICAL CHARACTERISTICS

- ✓ Molded Plastic DO-214AA Package
- ✓ Weight 2.5 grams (Approximate)
- ✓ Flammability rating UL 94V-0
- ✓ 12mm Tape and Reel Per EIA Standard 481
- ✓ Marking: Logo, Marking Code & Polarity Band or Notch On Top Surface

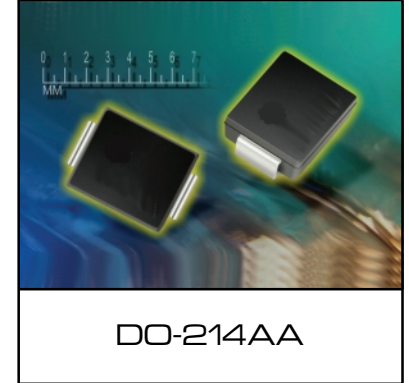

**DEVICE SYMBOL
(UNIDIRECTIONAL)**


TABLE 1 - SURGE RATINGS					
SERIES	I_{PP} 2 X 10 μ s AMPS	I_{PP} 10 X 1000 μ s AMPS	I_{TSM} 60 Hz AMPS	di/dt AMPS/ μ s (See Note 1)	dv/dt AMPS/ μ s (See Note 1)
SA	125	40	20	500	2000
SC	300	100	60	500	2000

Note 1: Critical Rate of Rise for On-State Current (di/dt) and Off-State Voltage (dv/dt).

DEVICE CHARACTERISTICS

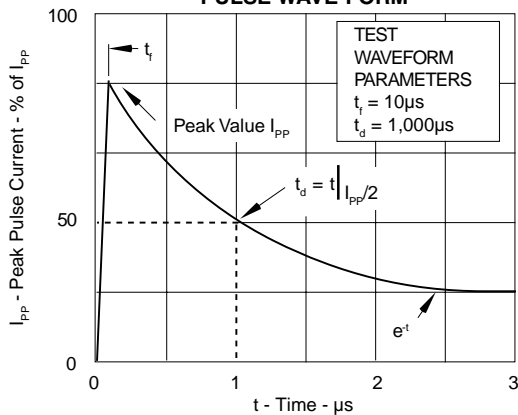
MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Surge Current - 50/60 Hz	I_{TSM}	60	AMPS
Junction Temperature	T_J	-40 TO 150	°C
Storage Temperature	T_{STG}	-55 TO 150	°C
Thermal Resistance(Junction) - SA Series	R_{QJC}	28	°C/WATT
Thermal Resistance(Junction) - SC Series	R_{QJC}	26	°C/WATT
Thermal Resistance(Ambient) - SA Series	R_{QJA}	90	°C/WATT
Thermal Resistance(Ambient) - SC Series	R_{QJA}	85	°C/WATT

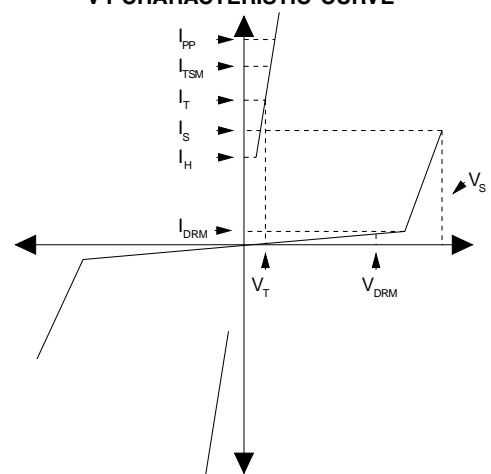
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	DEVICE MARKING CODE	REPETITIVE PEAK OFF-STATE VOLTAGE V_{DRM} VOLTS	SWITCHING VOLTAGE @100V/ μ s V_S VOLTS	MINIMUM HOLDING CURRENT (See Fig. 7) $di/dt = 1A/ms$ I_H mA	SWITCHING CURRENT I_S mA	MAXIMUM OFF-STATE CURRENT (See Fig. 4) @ V_{DRM} I_{DRM} μ A	MAXIMUM ON-STATE VOLTAGE (See Fig. 5) @ I_T V_T VOLTS	ON-STATE CURRENT I_T AMPS	TYPICAL CAPACITANCE @50V, 1 MHz C pF
PP0901SA	JA	80	110	150	800	5	5	1.0	65
PP0901SC	JC	80	110	150	800	5	5	1.0	65

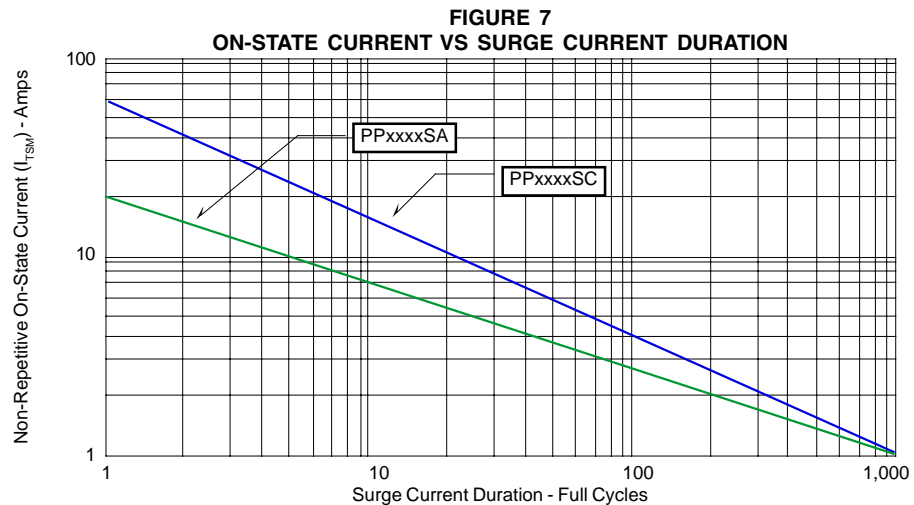
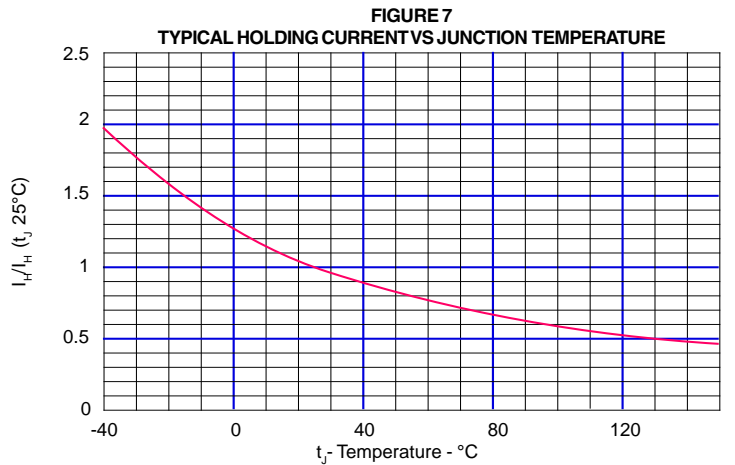
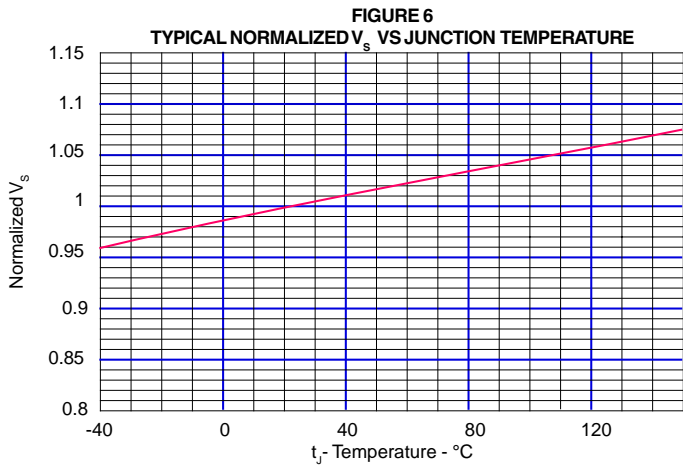
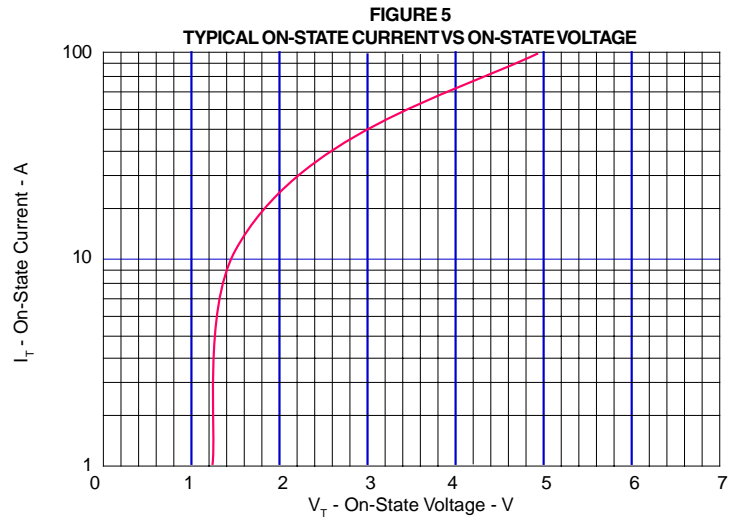
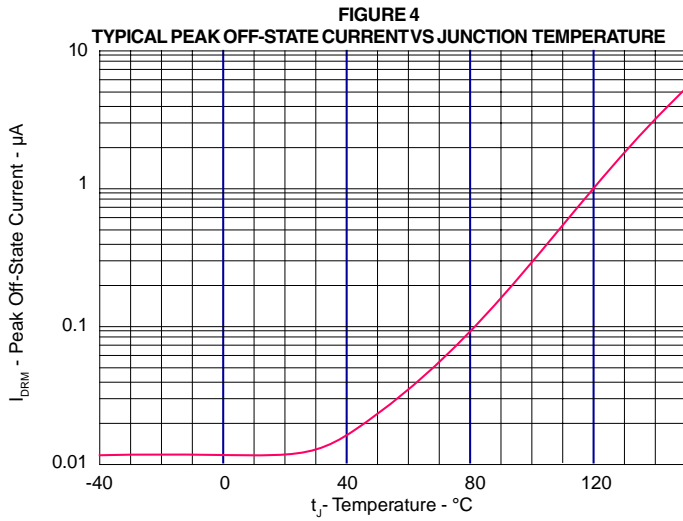
**FIGURE 1
PULSE WAVE FORM**



**FIGURE 2
V-I CHARACTERISTIC CURVE**



GRAPHS



PACKAGE OUTLINE & DIMENSIONS

PACKAGE OUTLINE		DO-214AA (SMB)			
DIM	MILLIMETERS		INCHES		
	MIN	MAX	MIN	MAX	
A	1.96	2.21	0.077	0.087	
B	3.30	3.94	0.130	0.155	
C	4.06	4.57	0.160	0.180	
D	2.00	2.50	0.079	0.098	
E	0.76	1.52	0.030	0.060	
F	5.21	5.59	0.205	0.220	
G	0.10	0.20	0.004	0.008	
H	0.15	0.31	0.006	0.012	
NOTES 1. Dimensions are exclusive of mold flash and metal burrs. TAPE & REEL ORDERING NOMENCLATURE 1. Surface mount product is taped and reeled in accordance with EIA-481. 2. Suffix-T13 = 13 Inch Reel - 3,000 pieces per 12mm tape, i.e., PP0901SA-T13.					
Outline & Dimensions: Rev 0 - 4/02, 06030					

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ProTek Devices
 2929 South Fair Lane, Tempe, AZ 85282
 Tel: 602-431-8101 Fax: 602-431-2288
 E-Mail: sales@protekdevices.com
 Web Site: www.protekdevices.com