

**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)**

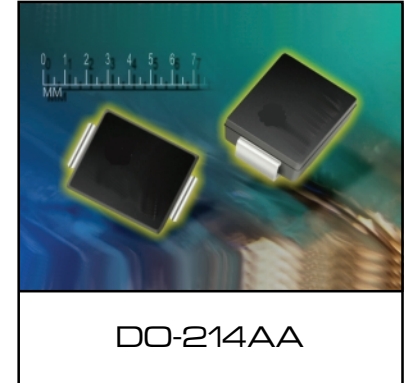
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 8/20 $\mu$ s - 95A, L4(Line-Gnd), 48A, L4(Line-Line) & 83A, L2(Power)

**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)**


SERIES	$I_{PP}$ 2 X 10 $\mu$ s AMPS	$I_{PP}$ 10 X 160 $\mu$ s AMPS	$I_{PP}$ 10 X 560 $\mu$ s AMPS	$I_{PP}$ 10 X 1000 $\mu$ s AMPS	$I_{TSM}$ 60 Hz AMPS	di/dt AMPS/ $\mu$ s (See Note 1)	dv/dt AMPS/ $\mu$ s (See Note 1)
SB	300	150	100	80	32	500	2000
SC	500	200	200	100	60	500	2000

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

## DEVICE CHARACTERISTICS

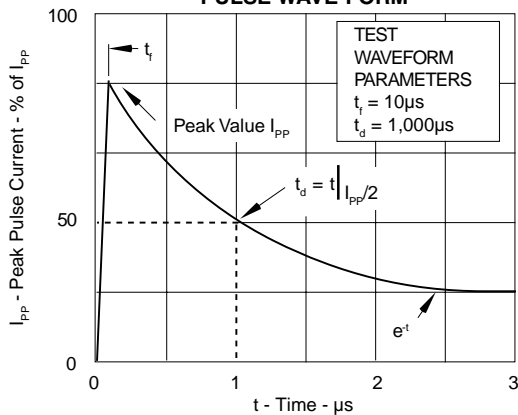
### MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Surge Current - 50/60 Hz	$I_{TSM}$	60/32	AMPS
Junction Temperature	$T_J$	-40 TO 150	°C
Storage Temperature	$T_{STG}$	-55 TO 150	°C
Thermal Resistance(Junction) - SB Series	$R_{QJC}$	28	°C/WATT
Thermal Resistance(Junction) - SC Series	$R_{QJC}$	26	°C/WATT
Thermal Resistance(Ambient) - SB Series	$R_{QJA}$	90	°C/WATT
Thermal Resistance(Ambient) - SC Series	$R_{QJA}$	85	°C/WATT

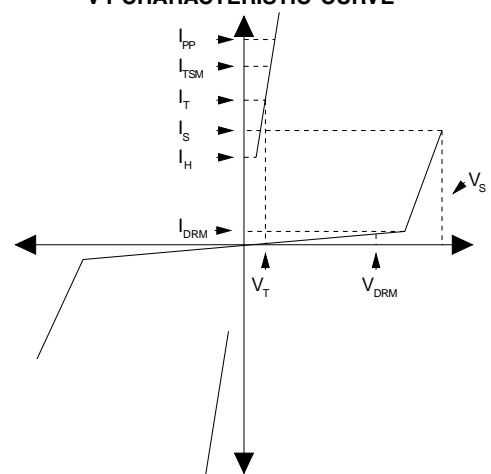
### ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	DEVICE MARKING CODE	REPETITIVE PEAK OFF-STATE VOLTAGE $V_{DRM}$ VOLTS	SWITCHING VOLTAGE @100V/ $\mu$ s $V_S$ VOLTS	MINIMUM HOLDING CURRENT (See Fig. 7) $I_H$ mA	SWITCHING CURRENT $I_S$ mA	MAXIMUM OFF-STATE CURRENT (See Fig. 4) @ $V_{DRM}$ $I_{DRM}$ $\mu$ 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
PP1101SB	JS	95	130	150	800	5	5	1.0	80
PP1101SC	JT	95	130	150	800	5	5	1.0	120

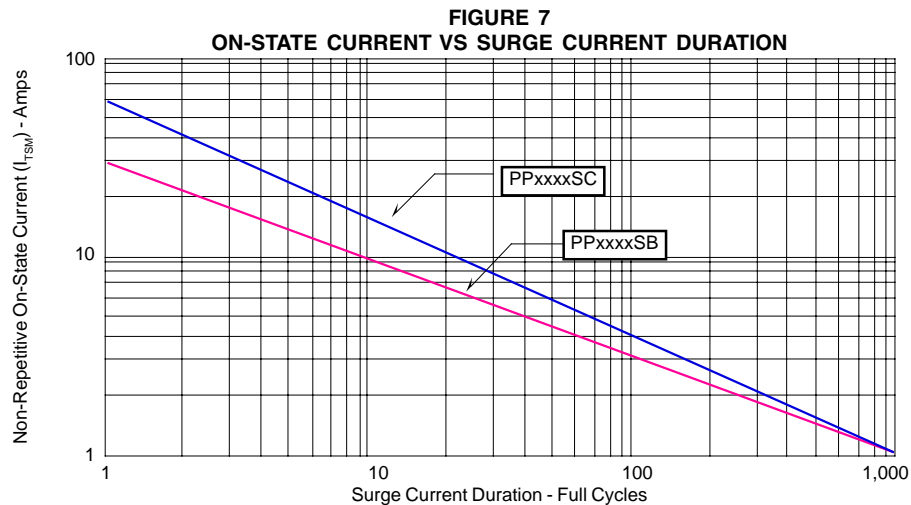
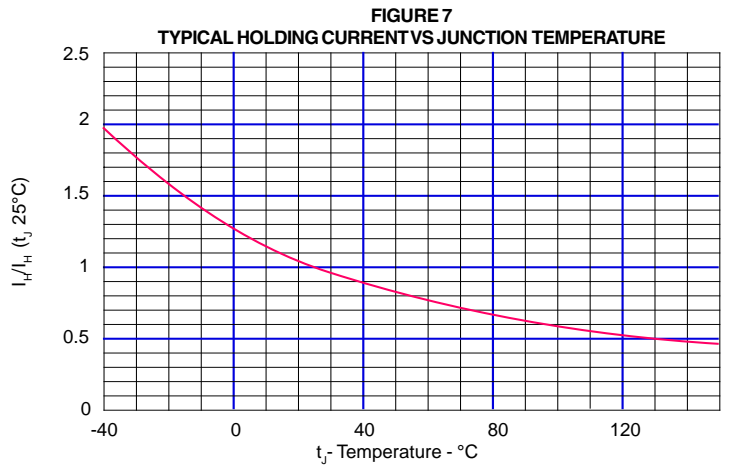
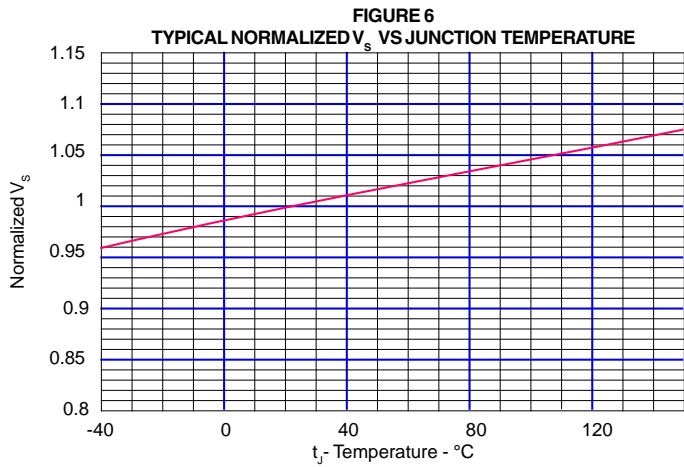
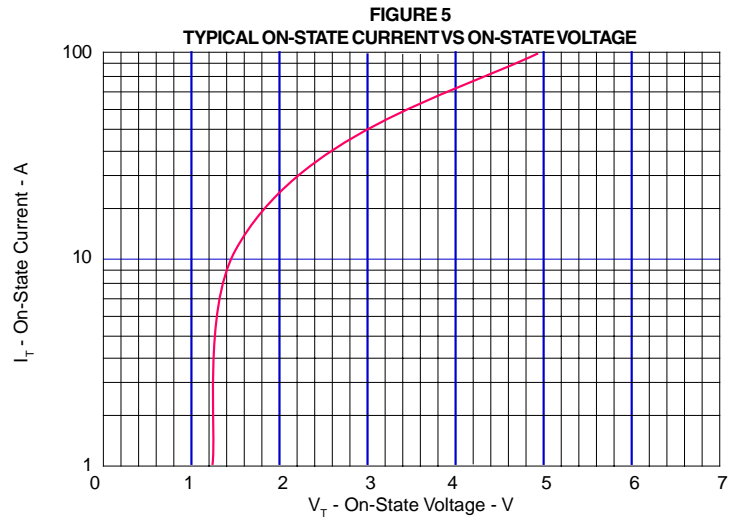
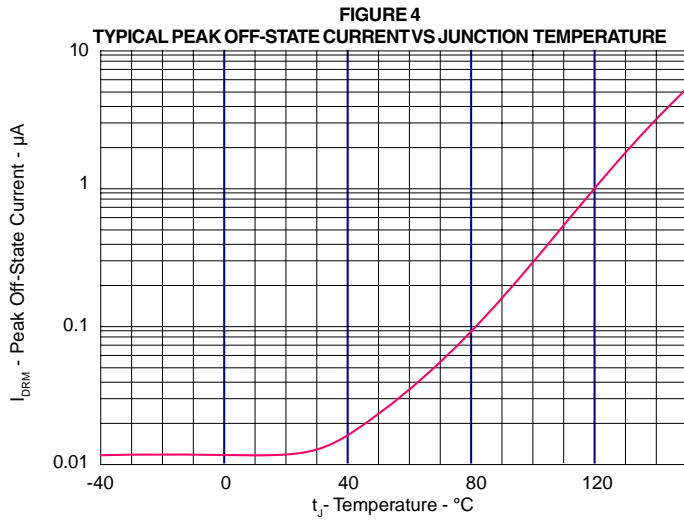
**FIGURE 1  
PULSE WAVE FORM**



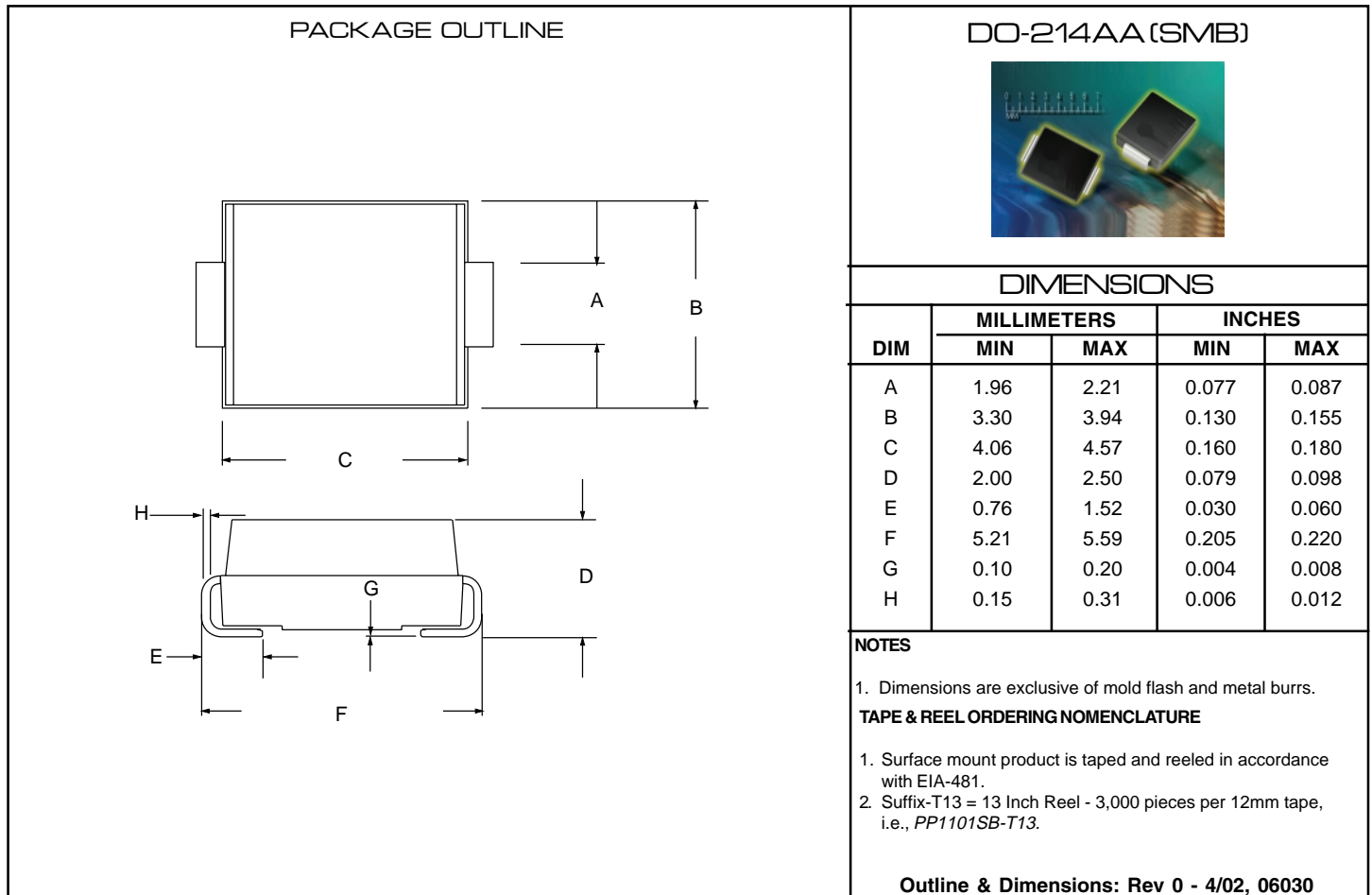
**FIGURE 2  
V-I CHARACTERISTIC CURVE**



## GRAPHS



## PACKAGE OUTLINE & DIMENSIONS



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