

UNIDIRECTIONAL 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)

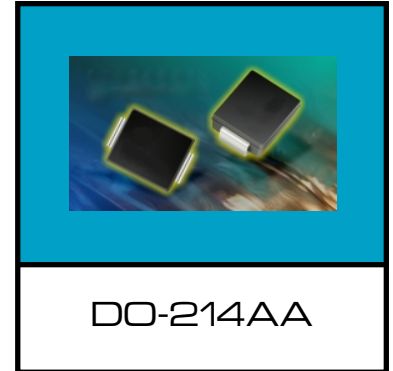
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 8/20 μ s - 95A, L4(Line-Gnd), 48A, L4(Line-Line) & 83A, L2(Power)

FEATURES

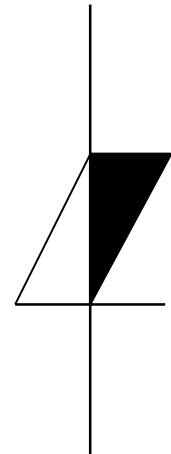
- ✓ *Complies with: FCC Part 68, UL 1459, Bellcore 1089, ITU-K.20 & K.21*
- ✓ Peak Off-State Voltage: 58 Volts
- ✓ Surge Current Capability(See Table 1)
- ✓ ESD Protection > 40 kilovolts

MECHANICAL CHARACTERISTICS

- ✓ Molded Plastic DO-214AA Package
- ✓ Weight 2.5 grams (Approximate)
- ✓ Flammability Rating UL 94V-0
- ✓ Device Marking: Logo, Marking Code & Polarity Band or Notch on Top Surface



DEVICE SYMBOL
(UNIDIRECTIONAL)



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

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

DEVICE CHARACTERISTICS

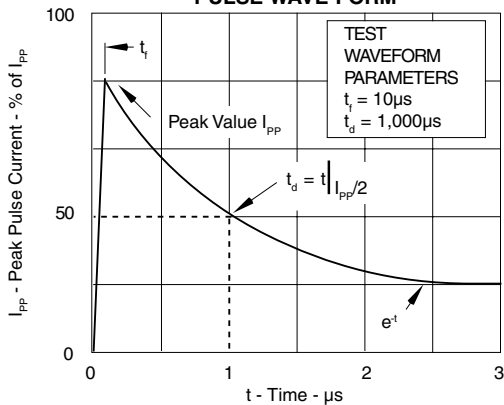
MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

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)	$R_{\theta ja}$	28	°C/Watt
Thermal Resistance(Ambient)	$R_{\theta ja}$	90	°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. 4) I_H mA	SWITCHING CURRENT I_S mA	MAXIMUM OFF-STATE CURRENT (See Fig. 3) @ V_{DRM} I_{DRM} μ A	MAXIMUM ON-STATE VOLTAGE (See Fig. 3) @ I_T V_T VOLTS	ON-STATE CURRENT I_T AMPS	TYPICAL CAPACITANCE @50V, 1 MHz C pF
PP0641SA	JD	58	70	150	800	5	5	1.0	90

**FIGURE 1
PULSE WAVE FORM**



**FIGURE 2
V-I CHARACTERISTIC CURVE**

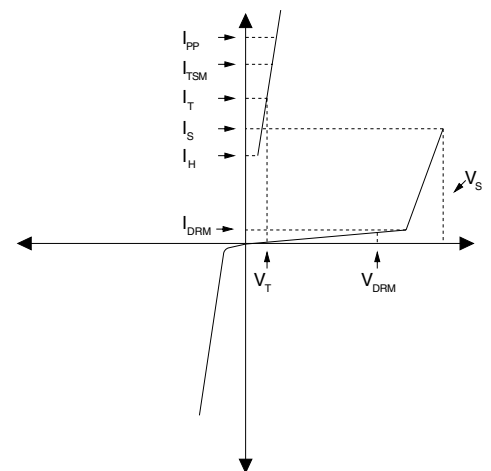


FIGURE 4
TYPICAL PEAK OFF-STATE CURRENT VS JUNCTION TEMPERATURE

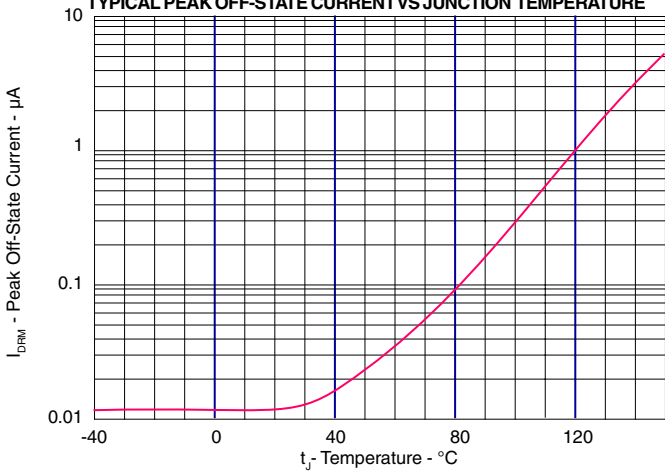


FIGURE 5
TYPICAL ON-STATE CURRENT VS ON-STATE VOLTAGE

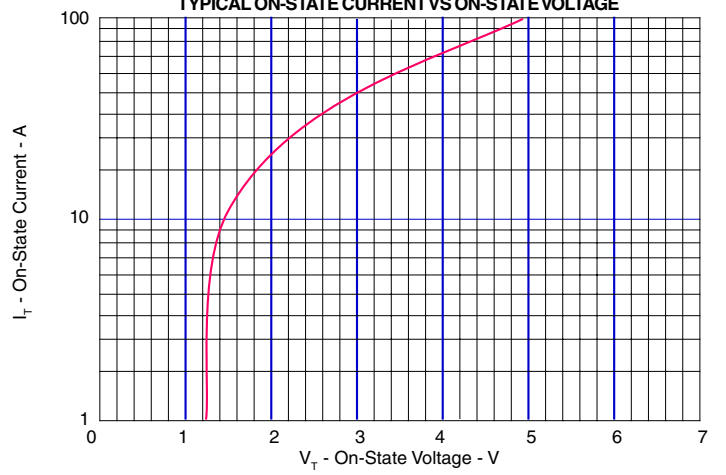


FIGURE 6
TYPICAL NORMALIZED V_s VS JUNCTION TEMPERATURE

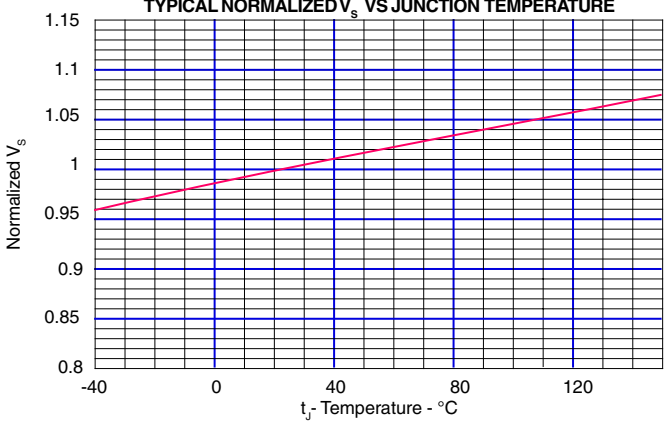


FIGURE 7
TYPICAL HOLDING CURRENT VS JUNCTION TEMPERATURE

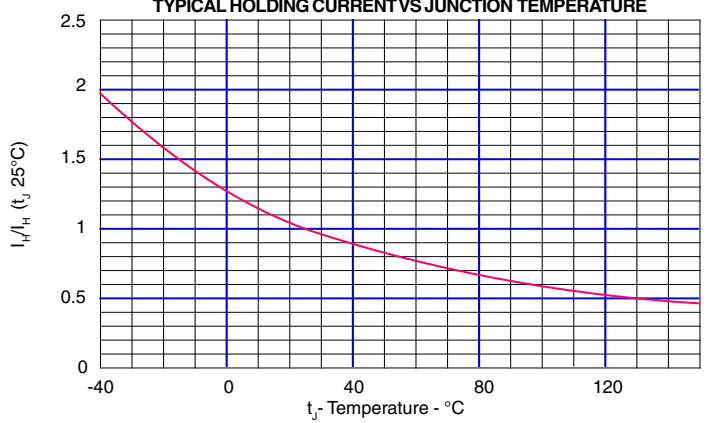
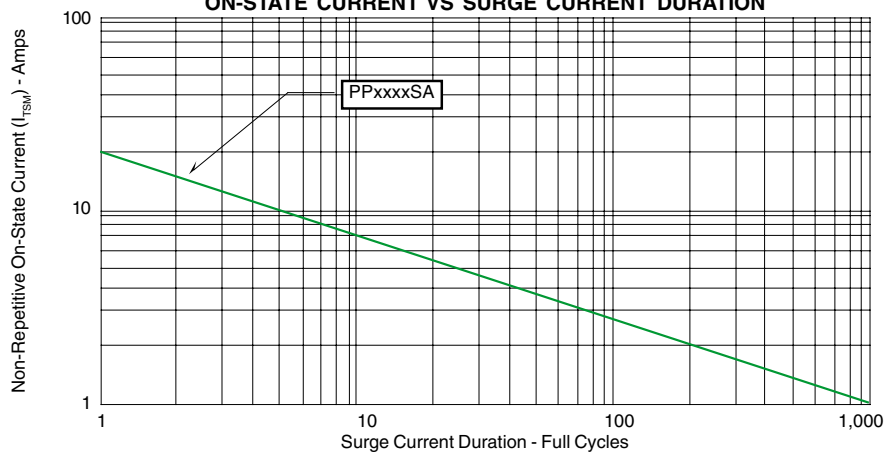
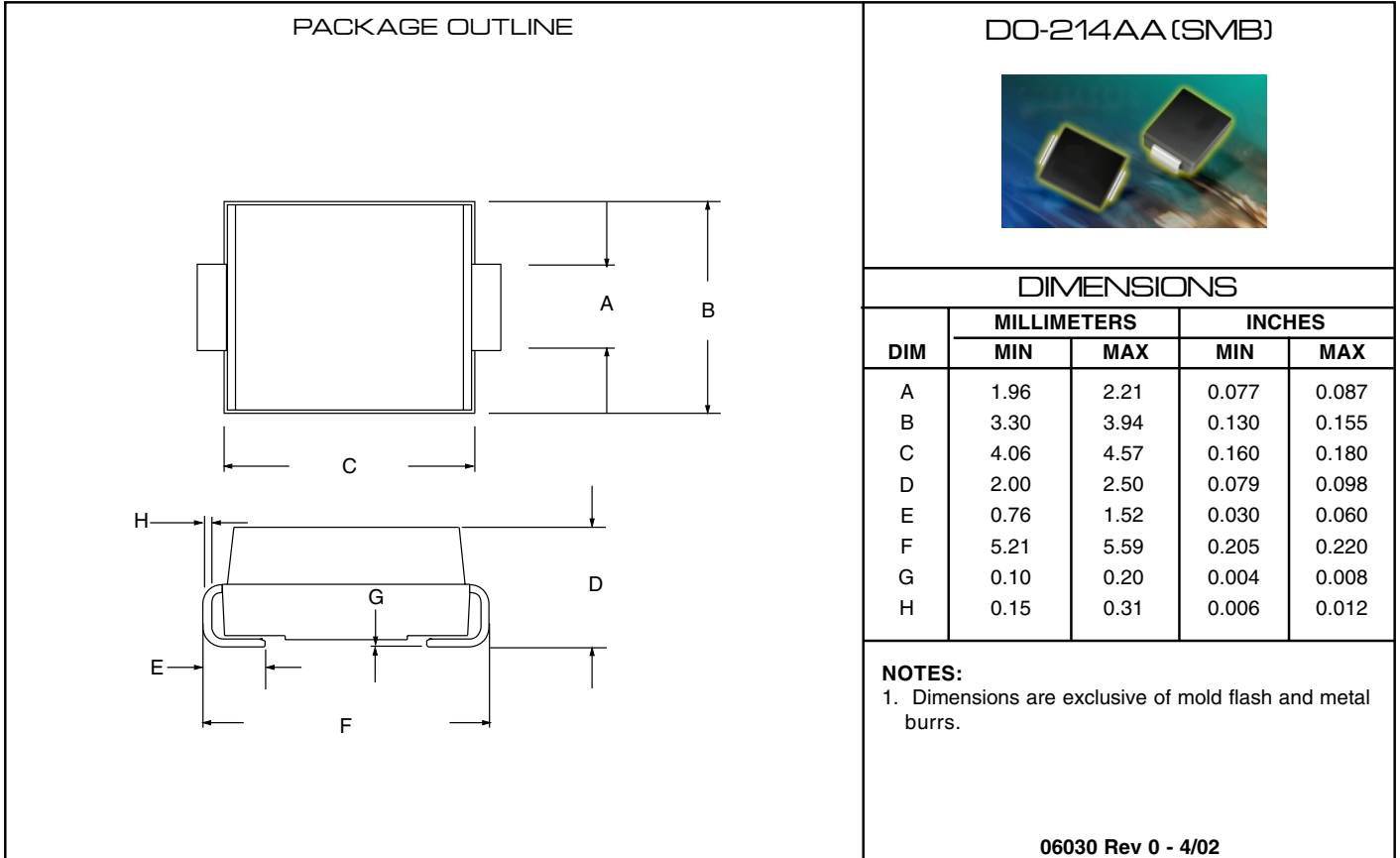


FIGURE 7
ON-STATE CURRENT VS SURGE CURRENT DURATION



PP0641SA

PACKAGE OUTLINE & DIMENSIONS



TAPE & REEL PACKAGING:

Surface mount product is taped and reeled in accordance with EIA-481, reel quantities and sizes are as follows:
7 Inch Reel - 3,000 pieces per reel; 13 Inch Reel - N/A

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