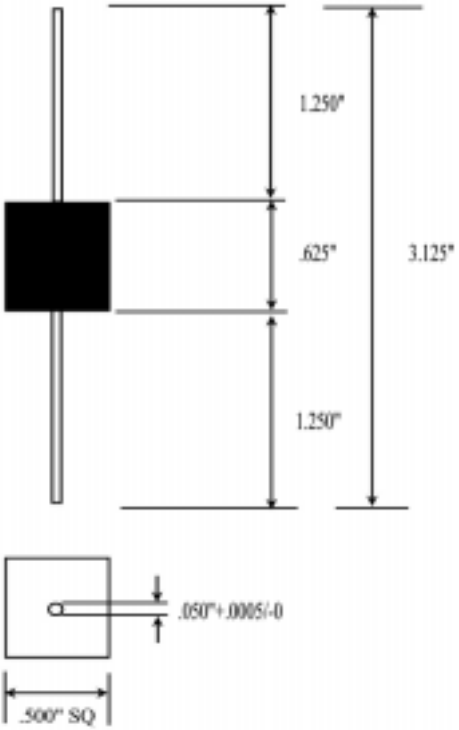
SUSSEX
SEMICONDUCTOR, INC.
12251 TOWNE LAKE DRIVE, FORT MYERS, FLORIDA, 33913 • TEL: (239) 768-6800 • FAX: (239) 768-6868

# AX-4

The new AX-4 series of high current transient suppressors have been specifically designed for use in **A.C. Line Protection.**




UL APPROVED

## Features:

- Glass Passivated Junction
- Bidirectional
- Multijunction
- Low Clamping Voltage
- Sharp Breakdown Voltage
- Low Slope Resistance
- Three Available devices with $V_{BR}$ 65V, 200V and 220V

## Maximum Ratings:

- Current Rating ($I_{pp}$) 6kA (See Note 1)
- Maximum Junction Temperature is 150°C
- Storage Temperature -55°C to 175°C
- Max Clamping of 330$V_{CL}$
- Rated $I_{pp}$ measured with 8 x 20 µsec pulse
- Standoff measured $V_{SO}$ at 80% $V_{BR}$

## Mechanical Characteristics:

- Molded plastic case
- Axial lead terminals (solderable per MIL-STD-202 Method 208)
- Device code and logo marked on every device

**For Additional Information See Charts and Graphs Or Call Factory at (239) 768-6800**

**TABLE 17A - AX-4 SERIES TRANSIENT SUPPRESSOR ELECTRICAL SPECIFICATIONS**

| SUSSEX PART NUMBERS | STANDOFF VOLTAGE ($V_{SO}$) Volts | MAX. REVERSE LEAKAGE ($I_R$)@$V_{SO}$ µA | REVERSE BREAKDOWN VOLTAGE ($V_{BR}$) @ $I_T$ | | TEST CURRENT ($I_T$) | MAX. CLAMPING VOLTAGE ($V_{CL}$) @ PEAK PULSE CURRENT ($I_{PP}$) (NOTE 1) | | MAX. TEMP. COEFFICIENT OF $V_{BR}$ | MAX. Capacitance 0 Bias 10k Hz |
|---|---|---|---|---|---|---|---|---|---|
| | | | MIN. Volts | MAX. Volts | mA | $V_{CL}$ Volts | $I_{PP}$ Amps | (%/°C) | (nF) |
| AX4-65 | 58 | 20 | 64 | 70 | 10 | 115 | 6000 | 0.100 | 6.5 |
| AX4-200 | 170 | 20 | 180 | 220 | 10 | 300 | 6000 | 0.100 | 2.5 |
| AX4-220 | 190 | 20 | 200 | 245 | 10 | 330 | 6000 | 0.100 | 2.2 |

Note 1: Pulse repitition rate is greater than 2 minutes between pulses.

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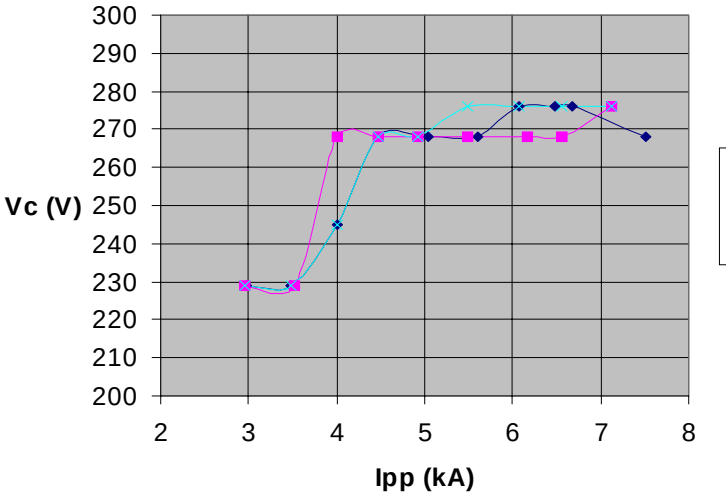
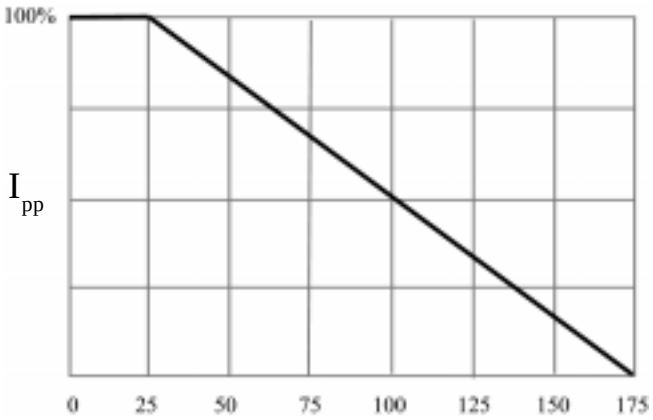
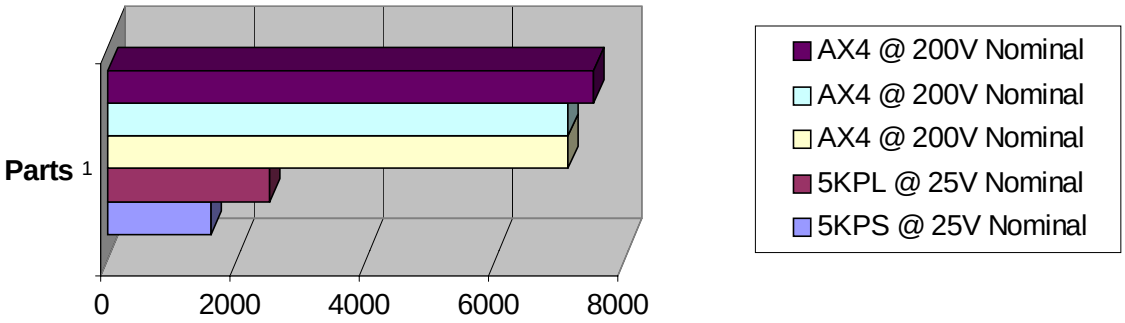
**Typical Sussex AX-4**



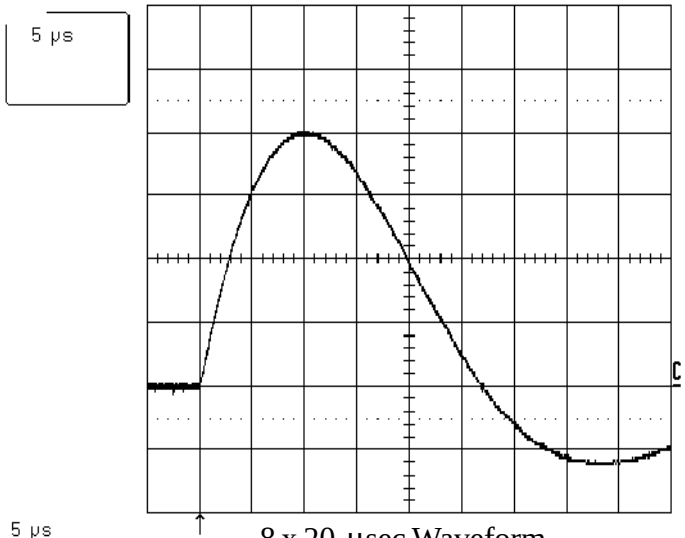

## Pulse Derating Curve




**Typical AX-4/5KPL/5KPS**




## Pulse Waveform




8 x 20 µsec Waveform

**Disclaimer:**

Sussex Semiconductor, Inc believes that the information contained in this publication is an accurate description of the typical characteristics. However, it is your responsibility to throughly test the product in your specific application to determine its performance, efficacy and safety.