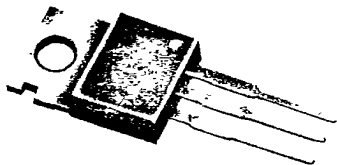


# CODI Semiconductor, Inc.

## 16 AMPERE SCHOTTKY BARRIER RECTIFIERS SR1620 thru SR1680



### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-STD-19500/228.
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- Super fast recovery times, high voltage.
- Dual rectifier (Epitaxial chips) construction.

### MECHANICAL DATA

Case: TO-220 molded plastic

Terminals: Lead solderable per MIL-STD-202, Method 208

Polarity: As marked.

Mounting position: Any

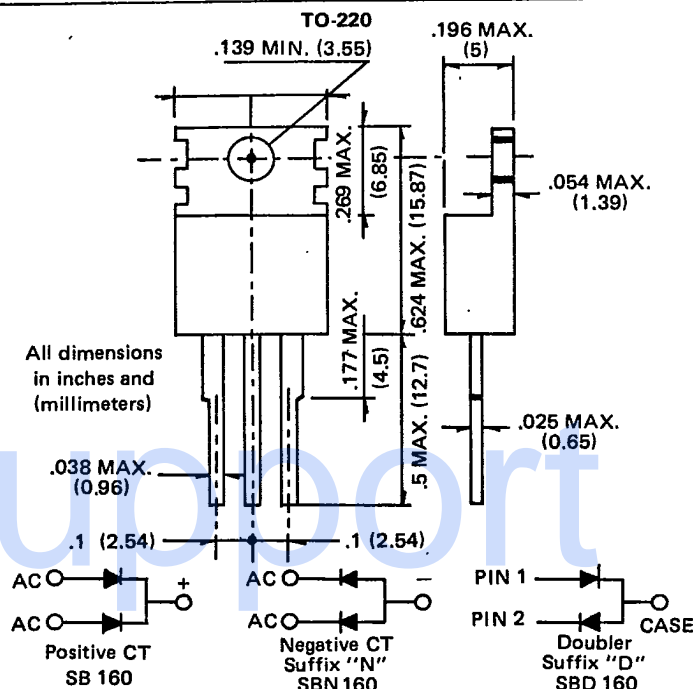
Weight: 0.08 ounces, 2.24 grams.

### VOLTAGE RANGE

20 to 80 Volts

### CURRENT

16 Amperes



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

	SR1620	SR1630	SR1640	SR1650	SR1660	SR1680	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	V
Maximum RMS Voltage	14	21	26	35	42	56	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	V
Maximum Average Forward Rectified Current at TC = 90°C	16						A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	250						A
Maximum Forward Voltage at 8.0A per element	0.65			0.75			V
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	TC = 25°C			10.0			mA
	TC = 100°C			100			
Typical Junction Capacitance (Note 1)	320						pF
Typical Thermal Resistance $\theta_{JA}$ (Note 2)	5						°C/W
Operating and Storage Temperature Range	-65 to +150						°C

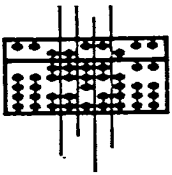
NOTES: 1—Measured at 1 MHz and applied reverse voltage of 4.0 VDC.  
2—Thermal Resistance Junction to Ambient.  
\*JEDEC Registered Value.

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## RATING AND CHARACTERISTIC CURVES

FIG 1 - FORWARD CURRENT DERATING CURVE

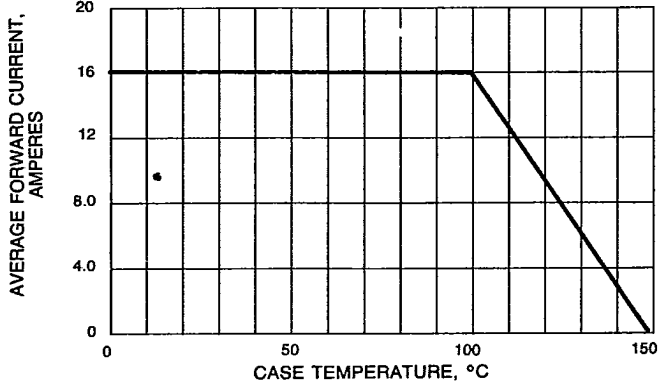


Fig. 2 - TYPICAL REVERSE CHARACTERISTICS

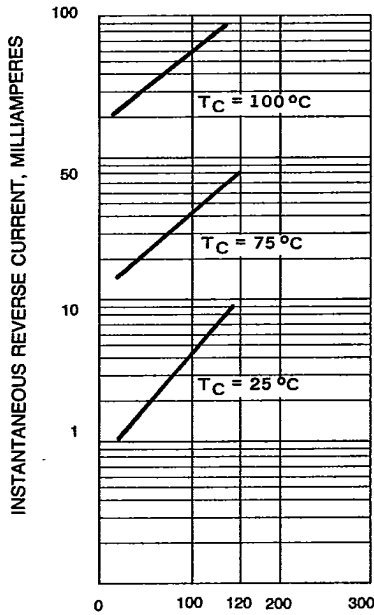


Fig. 3 - MAXIMUM NON-REPETITIVE SURGE CURRENT

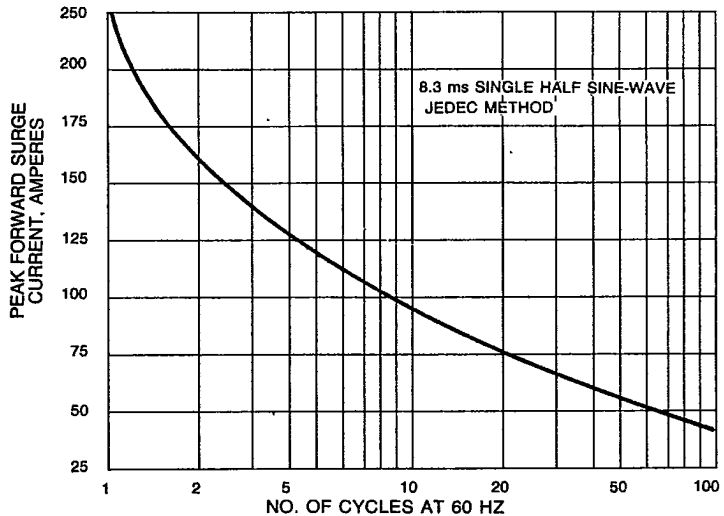


Fig. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

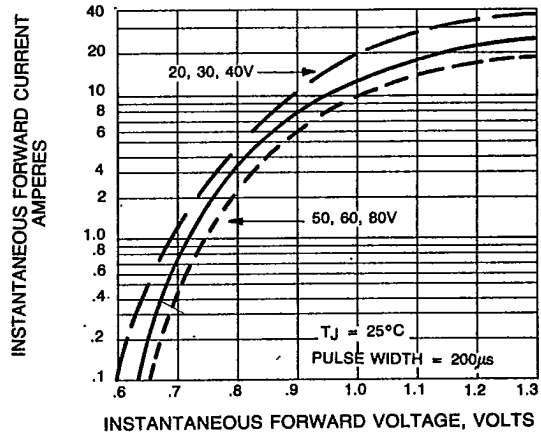
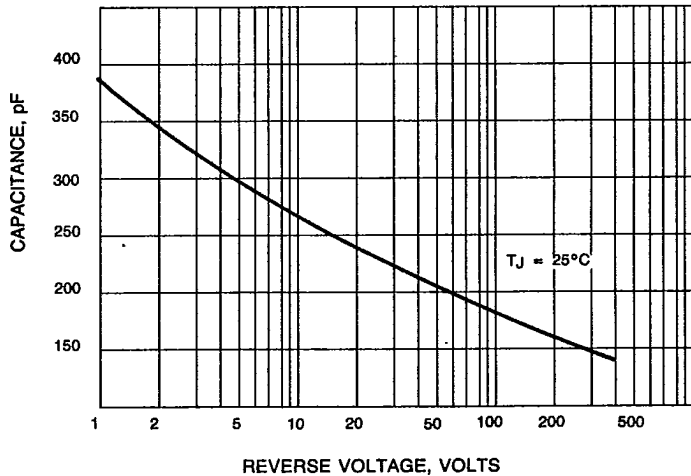


Fig. 5 - TYPICAL JUNCTION CAPACITANCE



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