

**SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE 20 to 60 Volts CURRENT 1.0 Ampere**

**FEATURES**

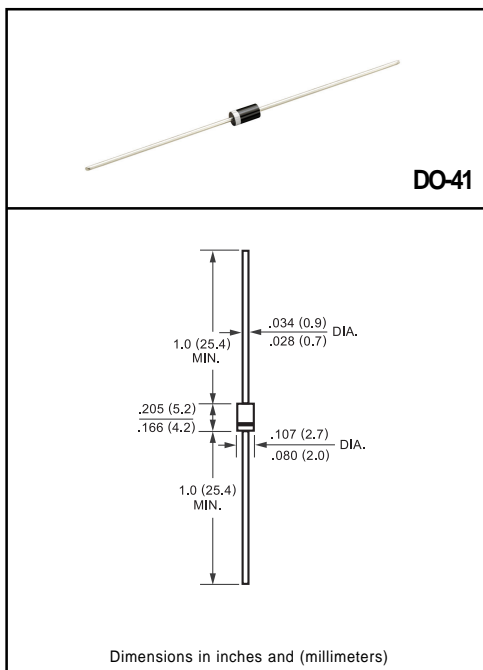
- \* Low switching noise
- \* Low forward voltage drop
- \* High current capability
- \* High switching capability
- \* High surge capability
- \* High reliability

**MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-O rate flame retardant
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.33 gram

**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%.



**MAXIMUM RATINGS** (At TA = 25°C unless otherwise noted)

RATINGS		SYMBOL	SR120	SR130	SR140	SR150	SR160	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	20	30	40	50	60	Volts
Maximum RMS Voltage		VRMS	14	21	28	35	42	Volts
Maximum DC Blocking Voltage		VDC	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current .375" (9.5mm) lead length		IO	1.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	40					Amps
Typical Thermal Resistance (Note 1)		RθJA	50					°C/W
Typical Junction Capacitance (Note 2)		CJ	110					pF
Operating Temperature Range		TJ	-65 to +125			-65 to +150		°C
Storage Temperature Range		TSTG	-65 to +150					°C

**ELECTRICAL CHARACTERISTICS** (At TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	SR120	SR130	SR140	SR150	SR160	UNITS
Maximum Instantaneous Forward Voltage at 1.0A DC		VF	.55			.70		Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	IR	1.0					mAmps
	@ TA = 100°C		10					mAmps

NOTES : 1. Thermal Resistance (Junction to Ambient): Vertical PC Board Mounting, 0.5" (12.7mm) Lead Length.  
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

# RATING AND CHARACTERISTIC CURVES ( SR120 THRU SR160 )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

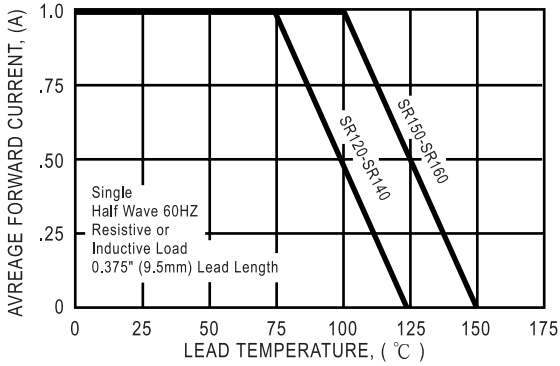


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

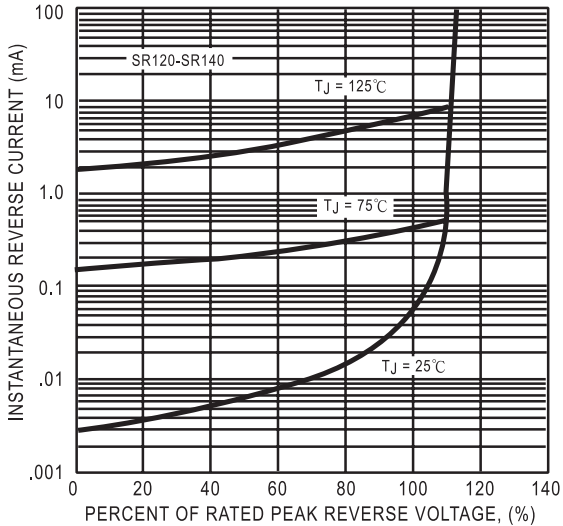


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

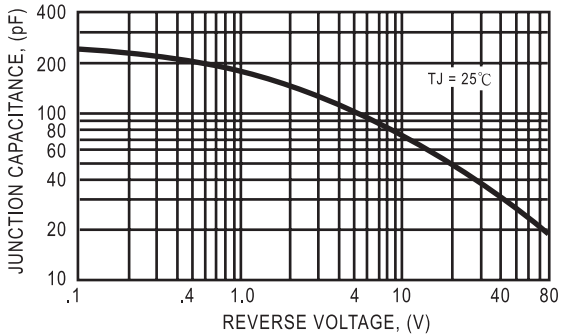


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

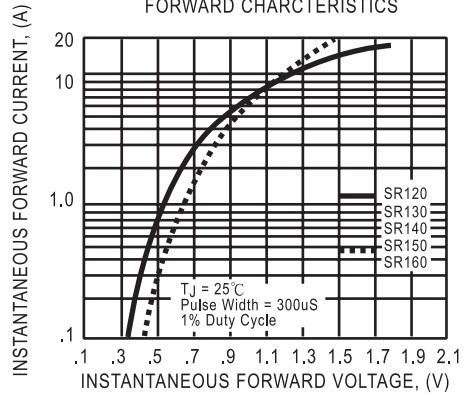


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

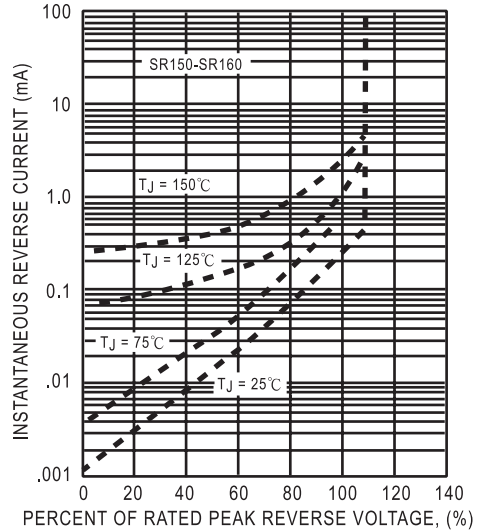


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

