

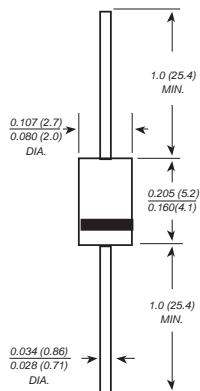


# SR120 THRU SR1A0

## SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts   Forward Current - 1.0 Ampere

### DO-41



Dimensions in inches and (millimeters)

### FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction,majority carrier conduction
- Low power loss,high efficiency
- High forward surge current capability
- High temperature soldering guaranteed:  
250°C/10 seconds,0.375"(9.5mm) lead length,  
5 lbs. (2.3kg) tension

### MECHANICAL DATA

**Case:** JEDEC DO-41 molded plastic body

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.012 ounce, 0.33 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

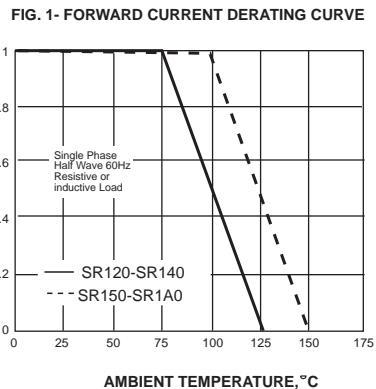
	SYMBOLS	SR 120	SR 130	SR 140	SR 150	SR 160	SR 170	SR 180	SR 190	SR 1A0	UNITS				
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	70	80	90	100	VOLTS				
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	49	56	63	70	VOLTS				
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	70	80	90	100	VOLTS				
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	I <sub>(AV)</sub>	1.0								Amp					
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	40.0								Amps					
Maximum instantaneous forward voltage at 1.0A	V <sub>F</sub>	0.55		0.70		0.85									
Maximum DC reverse current   TA=25°C at rated DC blocking voltage   TA=100°C	I <sub>R</sub>	1.0								mA					
		10.0													
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	110		80											
Typical thermal resistance (NOTE 2)	R <sub>qJA</sub>	50.0								°C/W					
Operating junction temperature range	T <sub>J</sub>	-65 to +125		-65 to +150											
Storage temperature range	T <sub>STG</sub>	-65 to +150								°C					

**Note:**1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

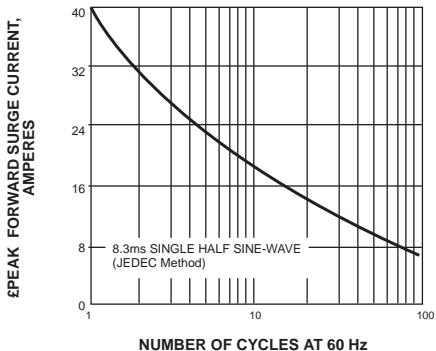
2.Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length,P.C.B. mounted

# RATINGS AND CHARACTERISTIC CURVES SR120 THRU SR1A0

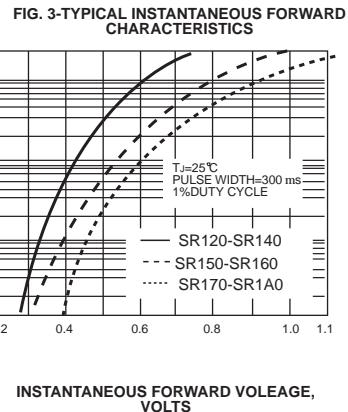
AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES



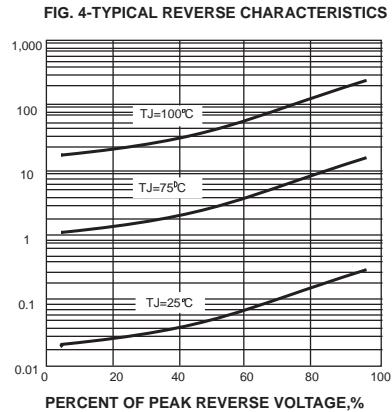
PeAK FORWARD SURGE CURRENT,  
AMPERES



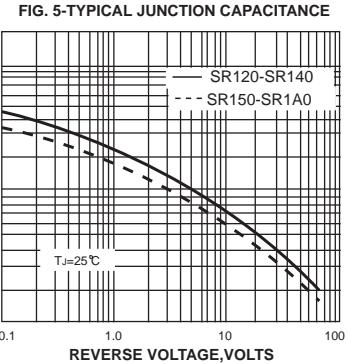
INSTANTANEOUS FORWARD  
CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT,  
MILLIAMPERES



JUNCTION CAPACITANCE,  
PF



TRANSIENT THERMAL IMPEDANCE,  
°C/W

