

# **SR120 THRU SR1200**

## SCHOTTKY BARRIER RECTIFIER

## VOLTAGE RANGE 20 to 200 Volts CURRENT 1.0 Ampere

#### **FEATURES**

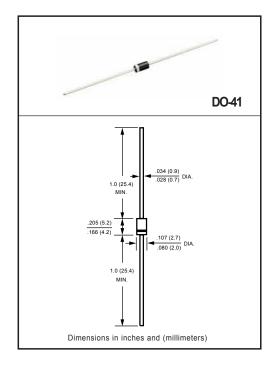
- \* Low switching noise
- \* Low forward voltage drop
- \* High current capability
- \* High switching capability
- \* High surge capabitity
- \* High reliability

### **MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: Device has UL flammability classification 94V-O
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.33 gram

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25  $^{\circ}\text{C}$  ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.



#### MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	SR120	SR130	SR140	SR150	SR160	SR180	SR1100	SR1150	SR1200	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at Derating Lead Temperature	I <sub>O</sub>	1.0									Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	40									Amps
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub>	50									°C/W
Typical Thermal Resistance (Note 1)	R <sub>θJL</sub>	15									
Typical Junction Capacitance (Note 3)	CJ	110									pF
Operating Temperature Range	TJ	150							°C		
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150								٥C	

#### $\textbf{ELECTRICAL CHARACTERISTICS} (@ \textit{TA=25} \ ^{\circ}\textit{C} \ unless \ otherwise \ noted)$

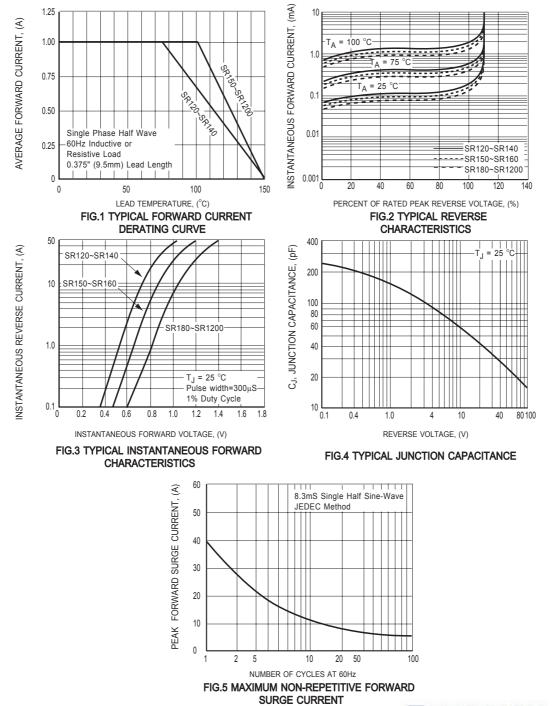
CHARACTERISTICS		SYMBOL	SR120	SR130	SR140	SR150	SR160	SR180	SR1100	SR1150	SR1200	UNITS
Maximum Instantaneous Forward Voltage at 1.0A DC		V <sub>F</sub>	.55			.70		.85				Volts
Maximum Average Reverse Current	@T <sub>A</sub> = 25°C		0.2									
at Rated DC Blocking Voltage	@T <sub>A</sub> = 100°C	'R					2					mΑ

NOTES: 1. Thermal Resistance: At 9.5mm lead lengths, PCB mounted.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2006-11

REV:B

## RATING AND CHARACTERISTICS CURVES (SR120 THRU SR1200)





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