

# SR1020 THRU SR1060

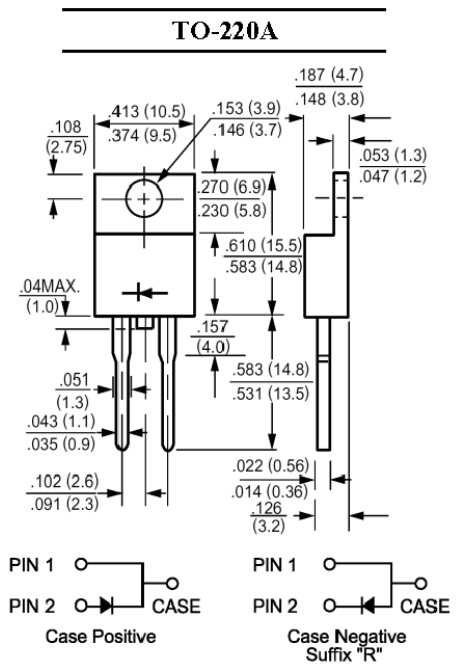
## SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage – 20 to 60 Volts

Forward Current – 10 Amperes

### Features

- Plastic package has UL Flammability Classification 94V-0
- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection



**Dimensions in inches and (millimeters)**

inductive load. For capacitive load, derate by 20%

Parameter	Symbols	SR1020	SR1030	SR1040	SR1050	SR1060	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	10					A
Peak Forward Surge Current 8.3ms Single half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	250					A
Maximum Forward Voltage at 10A DC and 25 °C	$V_F$	0.55			0.7		V
Maximum Reverse Current at $T_C = 25\text{ °C}$ at Rated DC Blocking Voltage $T_C = 125\text{ °C}$	$I_R$	1 50					mA
Typical Junction Capacitance <sup>1)</sup>	$C_J$	600			400		pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JC}$	2					°C/W
Operating Temperature Range	$T_J$	-55 to +125			-55 to +150		°C
Storage Temperature Range	$T_S$	-55 to +150					°C

<sup>1)</sup> Measured at 1 MHz and applied reverse voltage of 4 VDC

<sup>2)</sup> Thermal resistance from Junction to case per leg



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FIG.1- FORWARD CURRENT DERATING CURVE

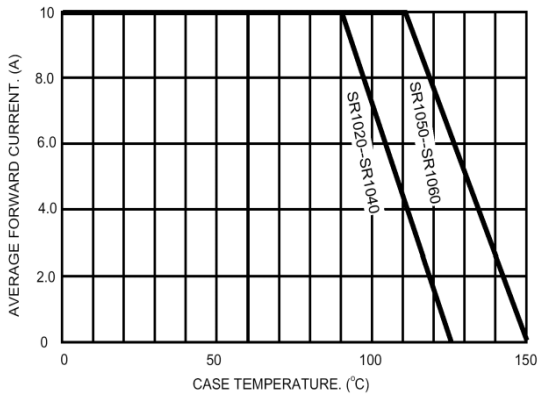


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

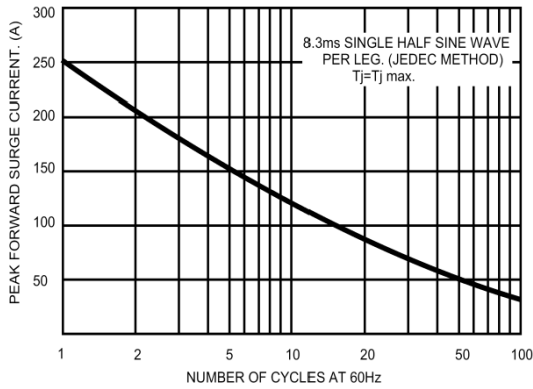


FIG.5- TYPICAL JUNCTION CAPACITANCE

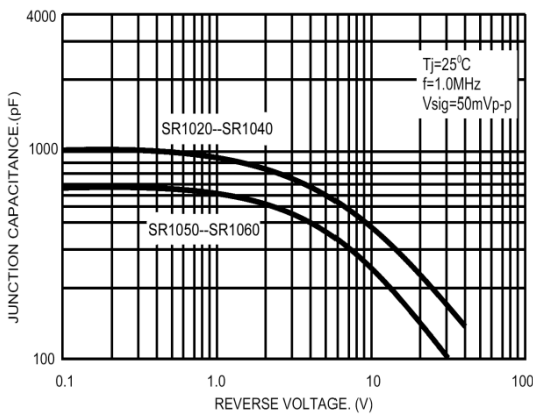


FIG.3- TYPICAL REVERSE CHARACTERISTICS

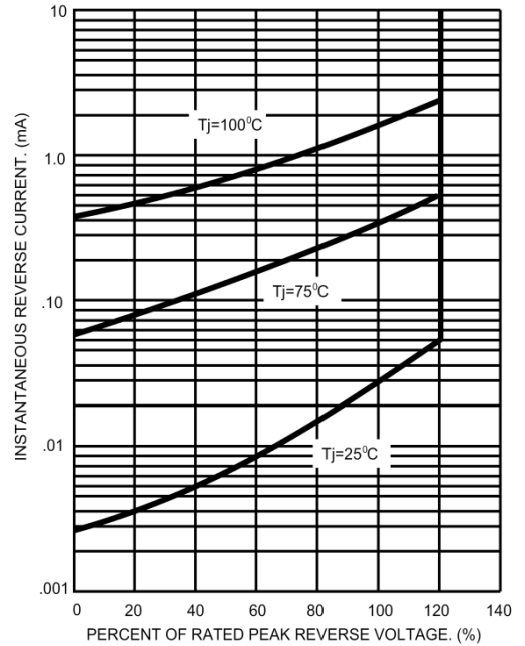


FIG.4- TYPICAL FORWARD CHARACTERISTICS

