SRS1020 THRU SRS1060

SCHOTTKY BARRIER RECTIFIER

康 比 電 子
HORNBY ELECTRONIC

REVERSE VOLTAGE: **20 to 60 VOLTS**

FORWARD CURRENT: **10.0 AMPERE**

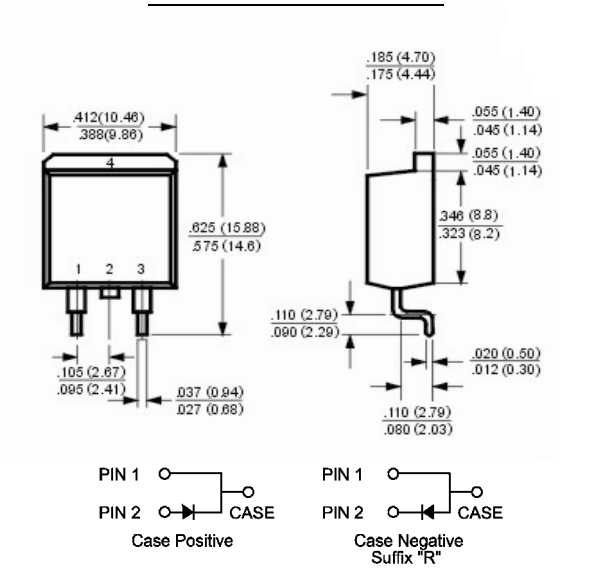
FEATURES

· For surface mounted application
· Metal of silicon rectifier,majority carrier conduction
· Guard ring for transient protection
· High capability
· Low power loss, high efficiency
· High current capability, low V_F
· High surge capacity
· For use in low voltage,high frequency inverters,free whelling,and polarity protection applications

MECHANICAL DATA

Case: Molded plastic, D^2PAK
Epoxy: UL 94V-O rate flame retardant
Terminals: Leads solderable per MIL-STD-202 method 208 guaranteed
Polarity: As marked
Mounting position: Any
Weight: 0.06ounce, 1.70gram

D^2PAK



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

	Symbols	*SRS1020*	*SRS1030*	*SRS1040*	*SRS1050*	*SRS1060*	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	**Volts**
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	**Volts**
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	**Volts**
Maximum Average Forward Rectified Current See Fig. 1	$I_{(AV)}$	10.0					**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	250					**Amp**
Maximum Forward Voltage at 10.0A DC and 25℃	V_F	0.55			0.70		**Volts**
Maximum Reverse Current at T_C=25℃ / **at Rated DC Blocking Voltage T_C=125℃**	I_R	1.0 / 50					**mAmp**
Typical Junction Capacitance (Note 1)	C_J	600			400		**pF**
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0					**℃/W**
Operating Temperature Range	T_J	-55 to +125			-55 to +150		**℃**
Storage Temperature Range	Tstg	-55 to +150					**℃**

NOTES:

1- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance from Junction to Case Per Leg

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RATINGS AND CHARACTERISTIC CURVES

FIG.1- FORWARD CURRENT DERATING CURVE

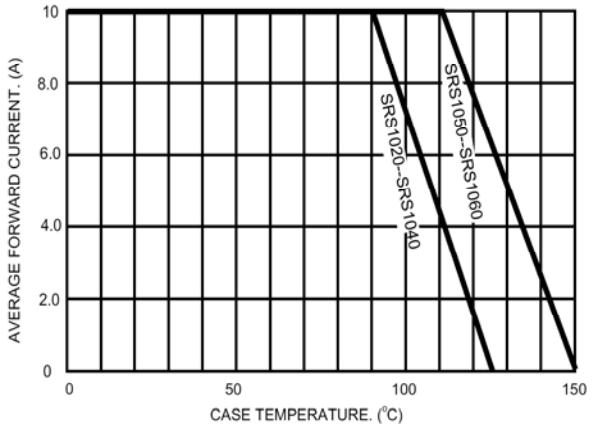

FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

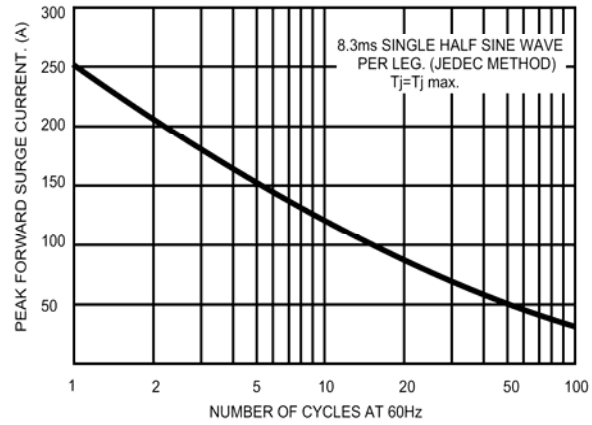

FIG.5- TYPICAL JUNCTION CAPACITANCE

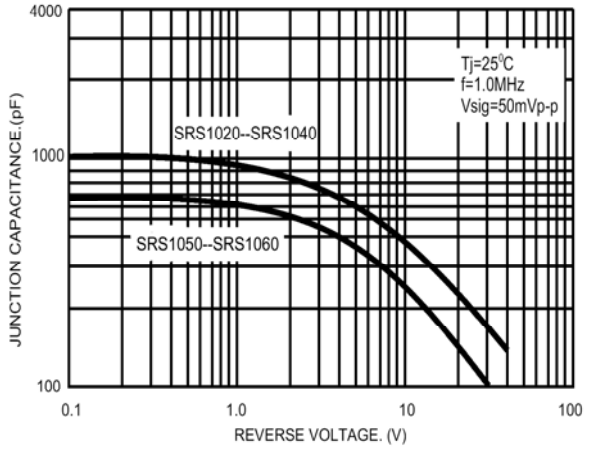

FIG.3- TYPICAL REVERSE CHARACTERISTICS

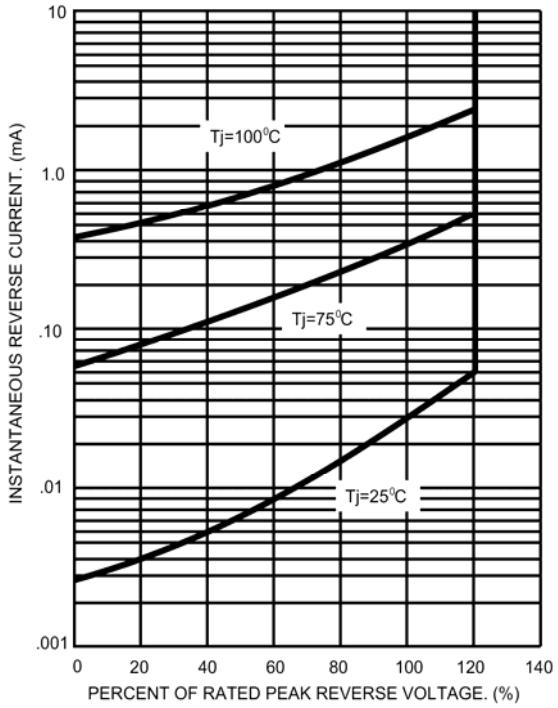

FIG.4- TYPICAL FORWARD CHARACTERISTICS