



## SCHOTTKY BARRIER RECTIFIERS

<b>15SQ030 THRU 15SQ100</b>	<b>VOLTAGE RANGE</b> 30 to 100 Volts <b>CURRENT</b> 15 Ampere
<b>FEATURES</b> <ul style="list-style-type: none"> <li>●Metal of silicon rectifier , majority carrier conduction</li> <li>●Guard ring for transient protection</li> <li>●Low power loss,high efficiency</li> <li>●High current capability,low VF</li> <li>●High surge capacity</li> <li>●Plastic package has UL flammability classification 94V-0</li> <li>●For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications</li> </ul> <b>MECHANICAL DATA</b> <ul style="list-style-type: none"> <li>●Case: JEDEC R-6 molded plastic</li> <li>●Polarity: Color band denotes cathode</li> <li>●Weight: 0.07 ounces , 2.1 grams</li> <li>●Mounting position: Any</li> </ul>	<p style="text-align: center;"><b>R - 6</b></p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p>

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave ,60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	15SQ030	15SQ035	15SQ040	15SQ045		15SQ060	15SQ080	15SQ100	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	30	35	40	45		60	80	100	V
Maximum RMS Voltage	VRMS	21	24.5	28	31.5		42	56	70	V
Maximum DC Blocking Voltage	VDC	30	35	40	45		60	80	100	V
Maximum Average Forward Rectified Current@Tc=95 °C	I(AV)	15								A
Peak Forward Surage Current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method)	IFSM	275								A
Peak Forward Voltage at 10A DC(Note1)	VF	0.55					0.7	0.8		V
Maximum DC Reverse Current @Tj=25°C	IR	0.5								mA
at Rated DC Bolcking Voltage @Tj=100°C		50								
Tyical Junction Capacitance (Note2)	CJ	450								PF
Tyical Thermal Resistance (Note3)	RθJC	3.0								°C/w
Operating Temperature Range	TJ	-55 to+150								°C
Storage Temperature Range	TSTG	-55 to+150								°C

NOTES:1.300us Pulse Width, 2%Dudy Cycle.  
 2.Measured at 1.0 MHZ and applied reverse voltage of 4.0VDC.  
 3.Thermal Resistance Junction to Case.



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FIG.1-FORWARD CURRENT DERATING CURVE

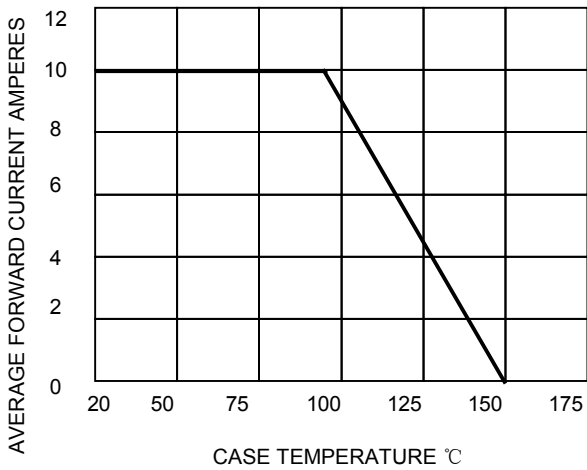


FIG.2-MAXIMUM NON-REPETITIVE SURGE

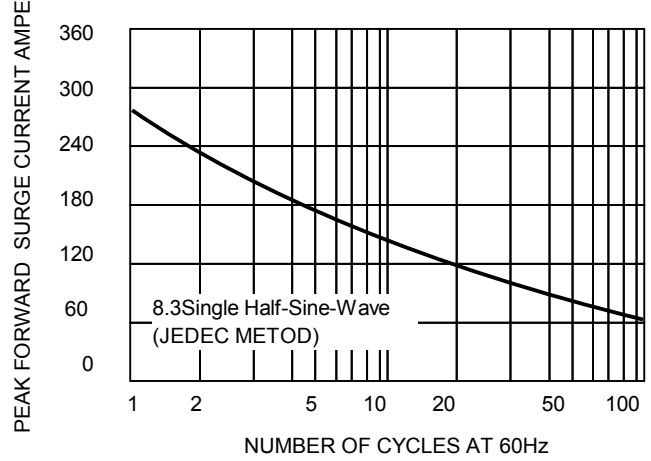


FIG.3-TYPICAL REVERSE CHARACTERISTICS

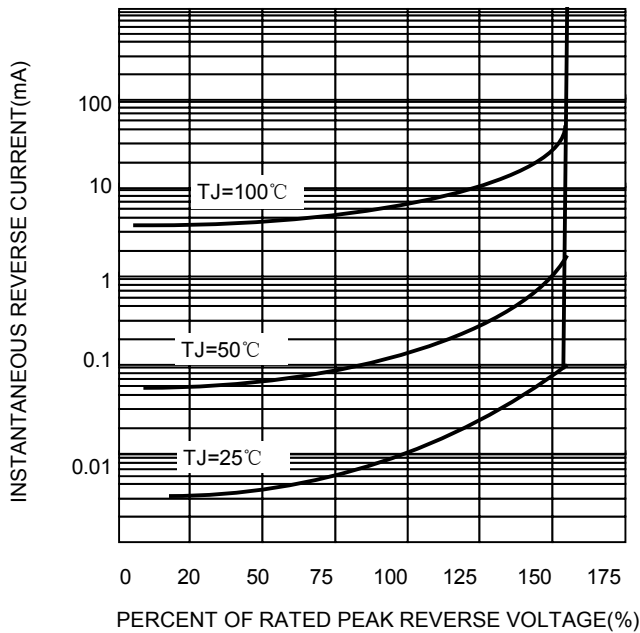


FIG.4-TYPICAL FORWARD CHARACTERISTICS

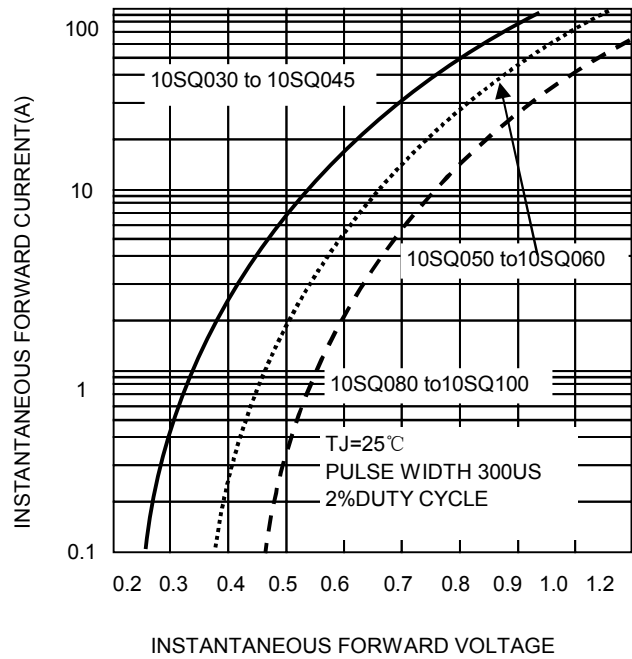


FIG.5-TYPICAL JUNCTION CAPACITANCE

