

10SQ030 thru 10SQ100

SCHOTTKY BARRIER RECTIFIERS	REVERSE VOLTAGE -30 to 100Volts FORWARD CURRENT -10.0 Amperes
FEATURES <ul style="list-style-type: none">• Metal of silicon rectifier, majority carrier conduction• Guard ring for transient protection• Low power loss, high efficiency• High current capability, low VF• High surge capacity• Plastic package has UL flammability classification 94V-0• For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications	<p style="text-align: center;"><u>R - 6</u></p> <p>Dimensions in inches and (millimeters)</p>
MECHANICAL DATA <ul style="list-style-type: none">• Case: JEDEC R-6 molded plastic• Polarity: Color band denotes cathode• Weight: 0.07 ounces, 2.1 grams• Mounting position: Any	
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS <p>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%</p>	
CHARACTERISTICS	SYMBOL 10SQ030 10SQ035 10SQ040 10SQ045 10SQ050 10SQ060 10SQ080 10SQ100 UNIT

Maximum Recurrent Peak Reverse Voltage	V RRM	30	35	40	45	50	60	80	100	V
Maximum RMS Voltage	V RMS	21	24.5	28	31.5	35	42	56	70	V
Maximum DC Blocking Voltage	V DC	30	35	40	45	50	60	80	100	V
Maximum Average Forward Rectified Current@Tc=95 °C	I(AV)					10				A
Peak Forward Surge 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 at Rated DC Blocking Voltage @Tj=100°C	IR			0.5		50				mA
Typical Junction Capacitance (Note2)	CJ			450						PF
Typical Thermal Resistance (Note3)	RθJC			3.0						°C/w
Operating Temperature Range	TJ			-55 to +150						°C
Storage Temperature Range	T STG			-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.