



TAYCHIPST SCHOTTKY BARRIER RECTIFIERS

10SQ030 THRU 10SQ100

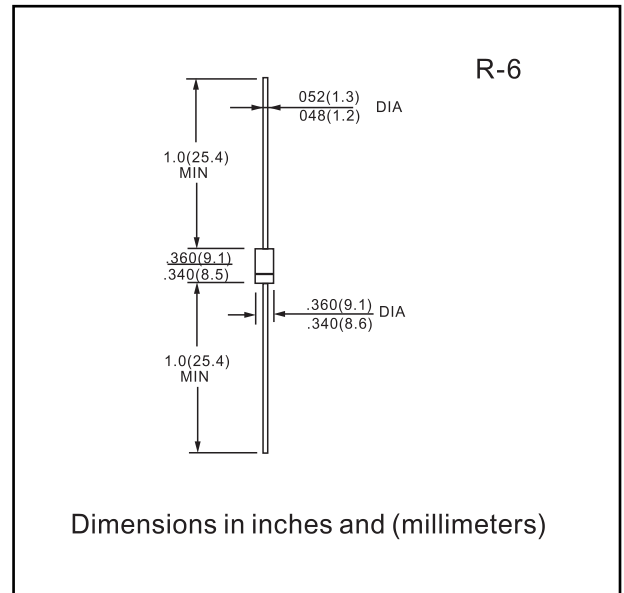
30V-100V 10A

FEATURES

- ◆ 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 94 V-0
- ◆ For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

MECHANICAL DATA

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

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	10SQ030	10SQ035	10SQ040	10SQ045	10SQ050	10SQ060	10SQ080	10SQ100	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	30	35	40	45	50	60	80	100	V
Maximum RMS Voltage	VRMS	21	24.5	28	31.5	35	42	56	70	V
Maximum DC Blocking Voltage	VDC	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	IR	0.5								mA
at Rated DC Bolcking Voltage @Tj=100°C		50								
Typical Junction Capacitance (Note2)	CJ	450								PF
Typical Thermal Resistance (Note3)	R JC	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.

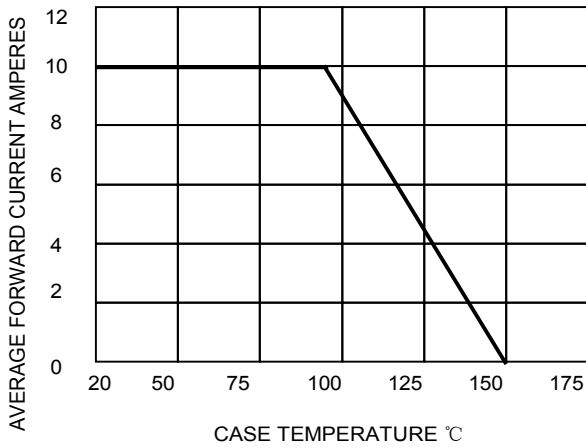
3.Thermal Resistance Junction to Case.





RATINGS AND CHARACTERISTIC CURVES 10SQ030 THRU 10SQ100

FIG.1-FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT AMPERES

FIG.2-MAXIMUM NON-REPETITIVE SURGE

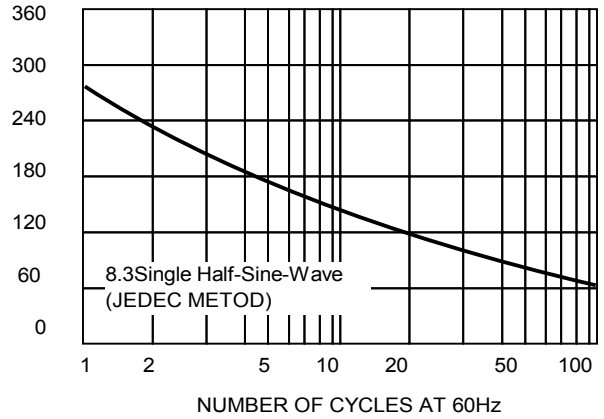


FIG.3-TYPICAL REVERSE CHARACTERISTICS

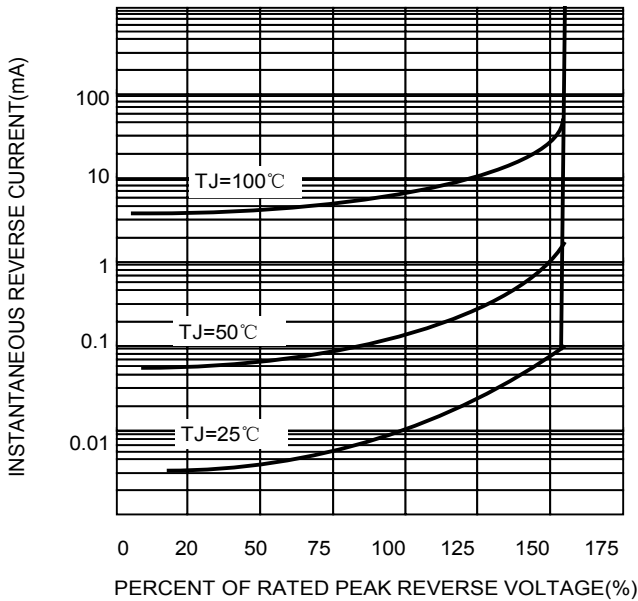


FIG.4-TYPICAL FORWARD CHARACTERISTICS

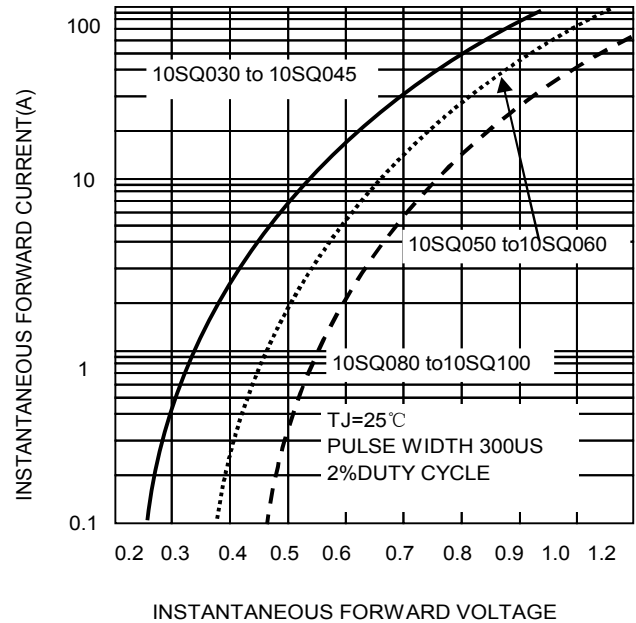


FIG.5-TYPICAL JUNCTION CAPACITANCE

