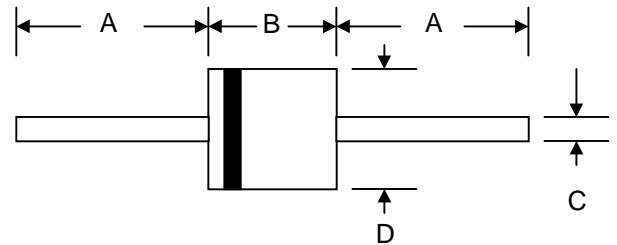


10A SCHOTTKY BARRIER RECTIFIERS

10SQ030 thru 10SQ100 Vishaymas General Semiconductor

FEATURES

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability



MECHANICAL DATA

Case: R-6/P-600, Molded Plastic

Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

Polarity: Cathode Band

Weight: 2.1 grams (approx.)

Mounting Position: Any

Marking: Type Number

Lead Free: For RoHS / Lead Free Version

R-6/P-600		
Dim	Min	Max
A	25.4	—
B	8.60	9.10
C	1.20	1.30
D	8.60	9.10
All Dimensions in mm		

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	IAV	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	TSTG	-55 to+150								°C	

NOTES:1.300us Pulse Width, 2%Duty Cycle.

2.Measured at 1.0 MHZ and applied reverse voltage of 4.0VDC.

3.Thermal Resistance Junction to Case.

FIG.1-FORWARD CURRENT DERATING CURVE

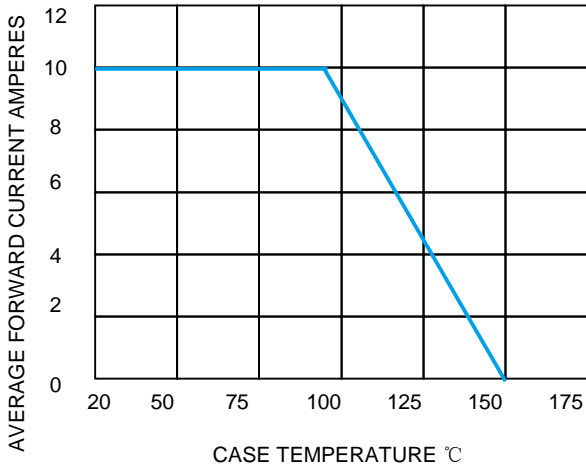


FIG.2-MAXIMUM NON-REPETITIVE SURGE

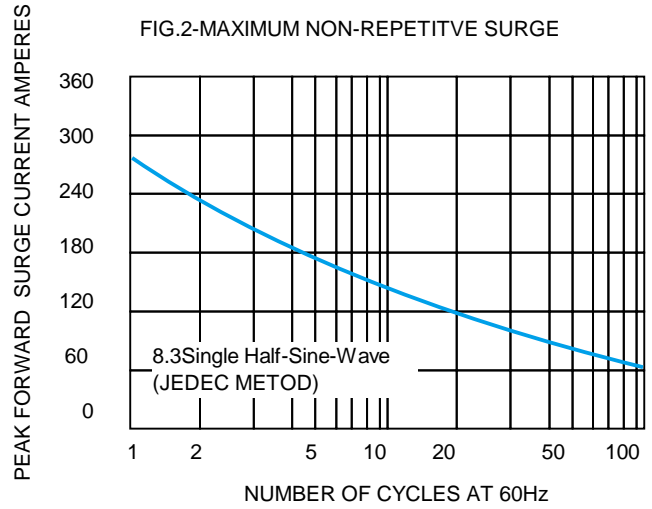


FIG.3-TYPICAL REVERSE CHARACTERISTICS

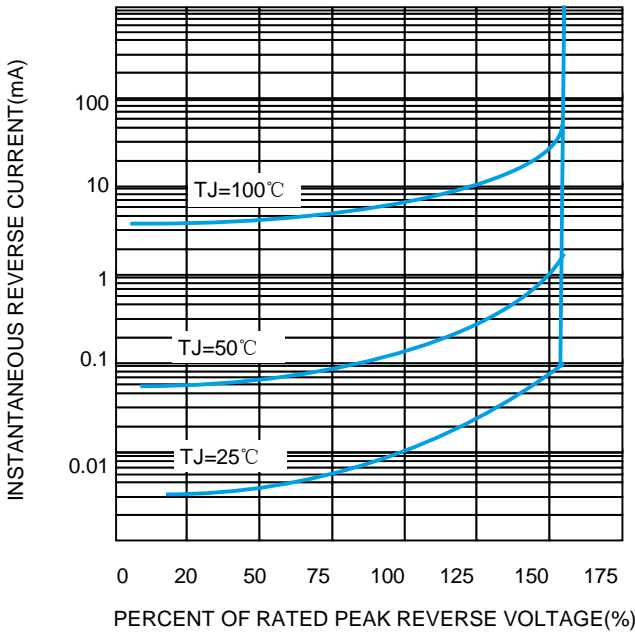


FIG.4-TYPICAL FORWARD CHARACTERISTICS

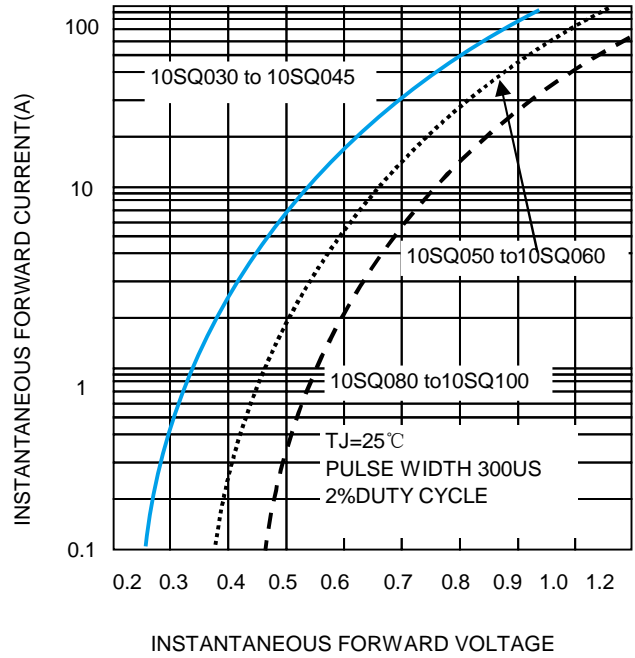


FIG.5-TYPICAL JUNCTION CAPACITANCE

