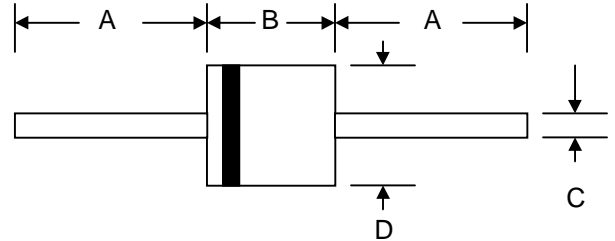


#### FEATURES

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



#### Mechanical Data

- Case: 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		
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	V <sub>RRM</sub>	30	35	40	45	50	60	80	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	21	24.5	28	31.5	35	42	56	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	30	35	40	45	50	60	80	100	V
Maximum Average Forward Rectified Current@T <sub>c</sub> =95 °C	I <sub>(AV)</sub>	10								A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method)	I <sub>FSM</sub>	275								A
Peak Forward Voltage at 10A DC(Note1)	V <sub>F</sub>	0.55			0.7		0.8			V
Maximum DC Reverse Current @T <sub>j</sub> =25°C	I <sub>R</sub>	0.5								mA
at Rated DC Bolcking Voltage @T <sub>j</sub> =100°C		50								
Tyical Junction Capacitance (Note2)	C <sub>J</sub>	450								PF
Tyical Thermal Resistance (Note3)	R <sub>J</sub>	3.0								°C/w
Operating Temperature Range	T <sub>J</sub>	-55 to+200								°C
Storage Temperature Range	T <sub>STG</sub>	-55 to+200								°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.

FIG.1-FORWARD CURRENT DERATING CURVE

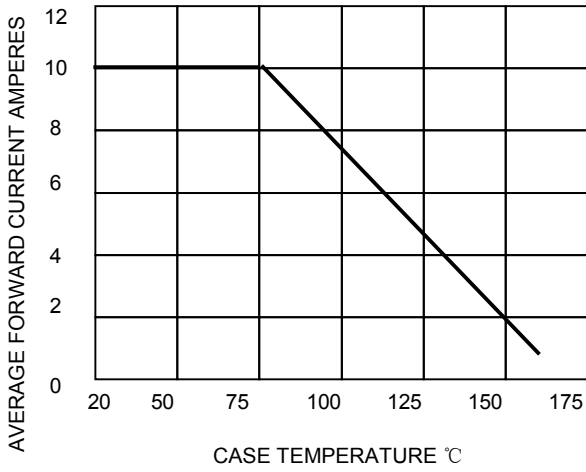


FIG.2-MAXIMUM NON-REPETITIVE SURGE

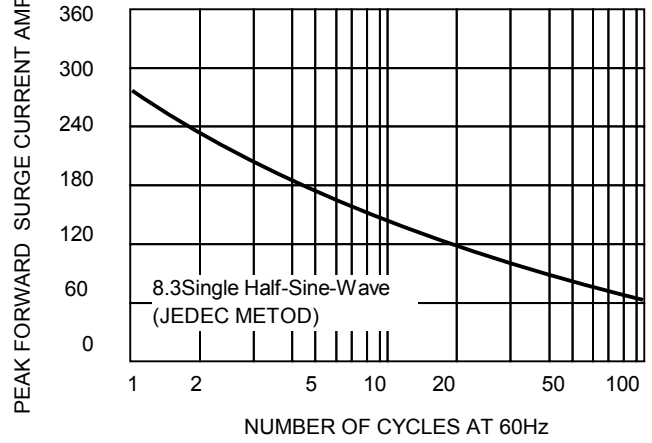


FIG.3-TYPICAL REVERSE CHARACTERISTICS

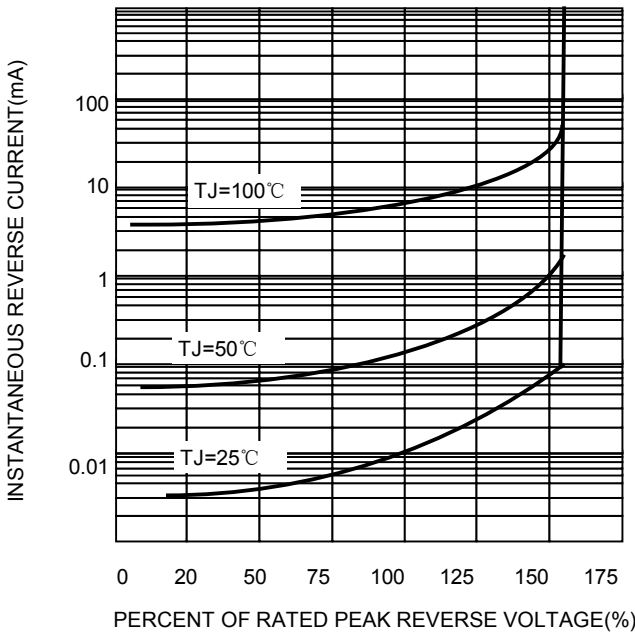


FIG.4-TYPICAL FORWARD CHARACTERISTICS

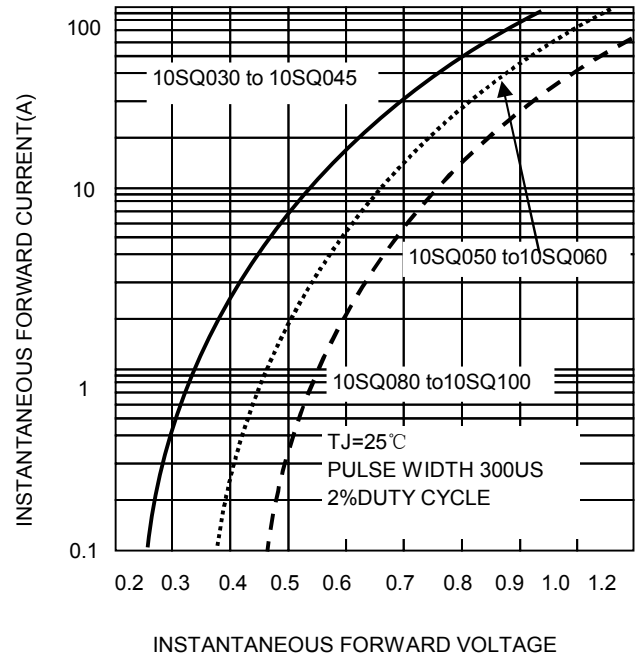


FIG.5-TYPICAL JUNCTION CAPACITANCE

