

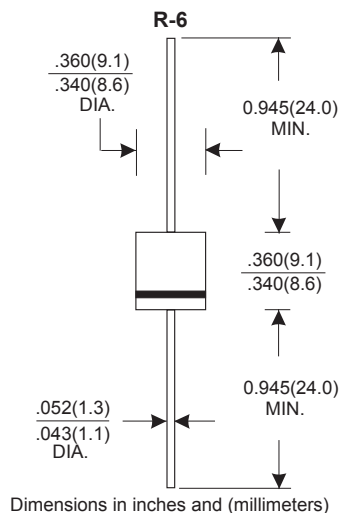
## 10.0A SCHOTTKY BARRIER RECTIFIERS

### Features:

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability
- \* Epitaxial construction

### Mechanical Data:

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 1.10 grams
- \* Both normal and Pb free product are available:
- \* Normal: 80~95%Sn, 5~20%Pb
- \* Pb free: 99 Sn above can meet Rohs environment substance directive request



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	10SQ020	10SR040	10SQ045	10SQ060	10SQ080	10SQ100	UNITS
Maximum Recurrent Peak Reverse Voltage	20	40	45	60	80	100	V
Maximum RMS Voltage	14	28	31.5	42	56	70	V
Maximum DC Blocking Voltage	20	40	45	60	80	100	V
Maximum Average Forward Rectified Current @TC=95°C	10.0						A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	275						A
Maximum Instantaneous Forward Voltage at 10.0A	0.52		0.68		0.80		V
Maximum DC Reverse Current Ta=25°C	100						uA
at Rated DC Blocking Voltage Ta=125°C	30						mA
Typical Junction Capacitance (Note1)	450						pF
Typical Thermal Resistance RθJA (Note 2)	4						°C/W
Operating Temperature Range Tj	-65 — +175						°C
Storage Temperature Range Tstg	-65 — +175						°C

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

**RATING AND CHARACTERISTIC CURVES (10SQ020 THRU 10SQ100)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

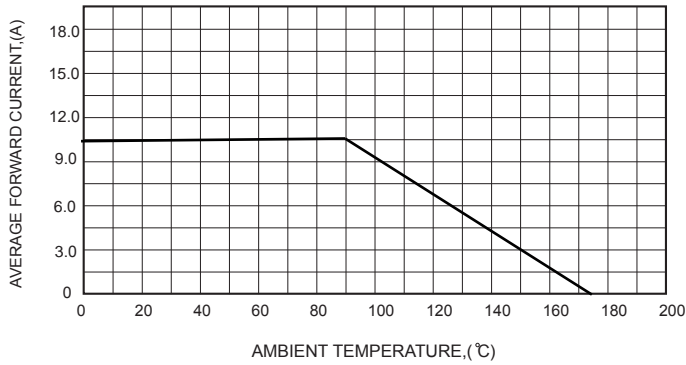


FIG.2-TYPICAL FORWARD CHARACTERISTICS

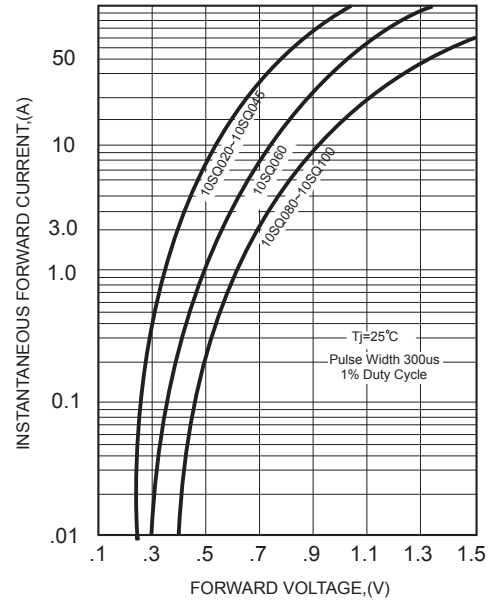


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

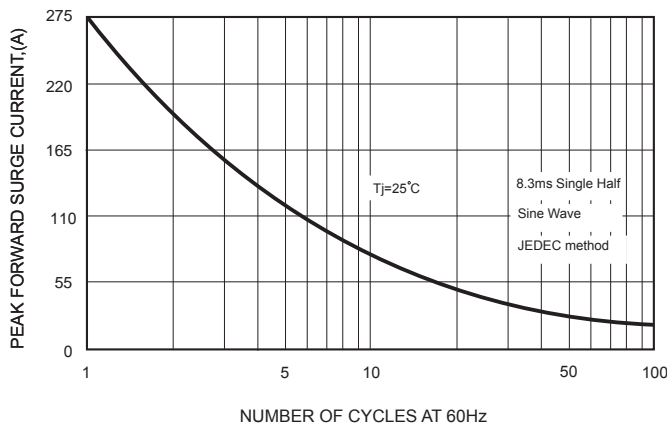


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

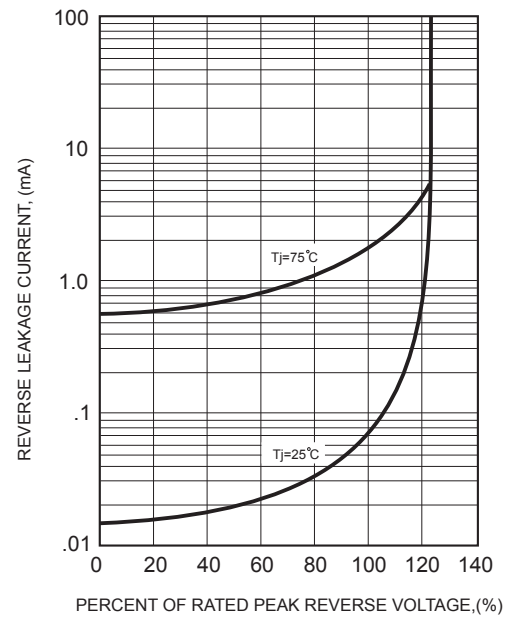


FIG.4-TYPICAL JUNCTION CAPACITANCE

