



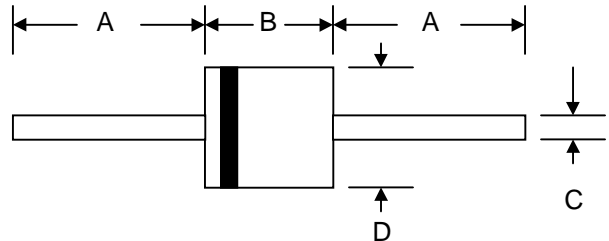
15SQ030-15SQ100



15A SCHOTTKY BARRIER DIODE

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 | 15SQ030 | 15SQ035 | 15SQ040 | 15SQ045 | 15SQ050 | 15SQ060 | 15SQ080 | 15SQ100 | 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@T _c =95 °C | I _(AV) | 15 | | | | | | | | A | |
| Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method) | I _{FSM} | 275 | | | | | | | | A | |
| Peak Forward Voltage at 10A DC(Note1) | V _F | 0.55 | | | 0.7 | | 0.8 | | | V | |
| Maximum DC Reverse Current @T _j =25°C at Rated DC Bolcking Voltage @T _j =100°C | I _R | 0.5 | | | | | 50 | | | | mA |
| Tyical Junction Capacitance (Note2) | C _J | 450 | | | | | | | | | PF |
| Tyical Thermal Resistance (Note3) | R _J | 3.0 | | | | | | | | | °C/w |
| Operating Temperature Range | T _J | -55 to+200 | | | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -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

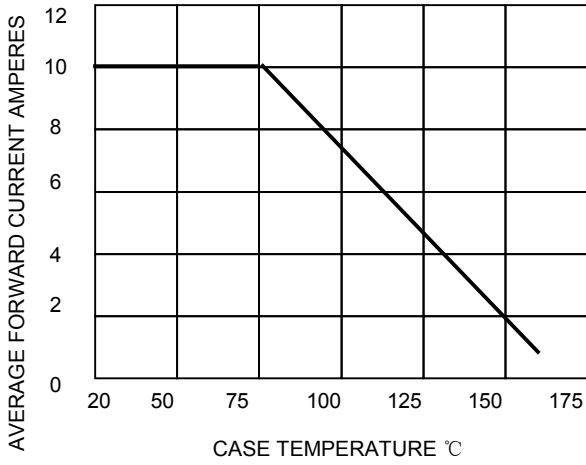


FIG.2-MAXIMUM NON-REPETITIVE SURGE

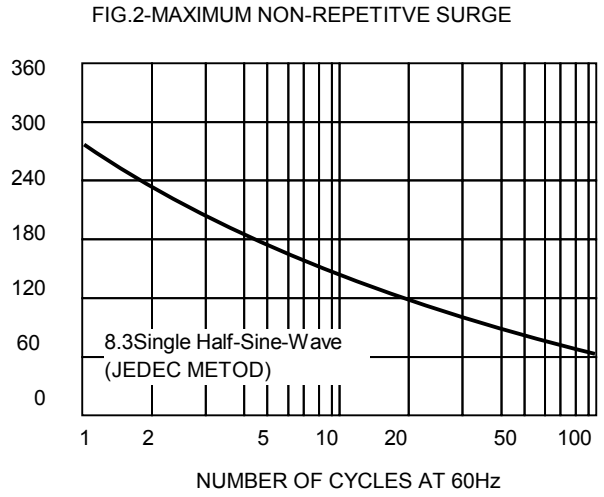


FIG.3-TYPICAL REVERSE CHARACTERISTICS

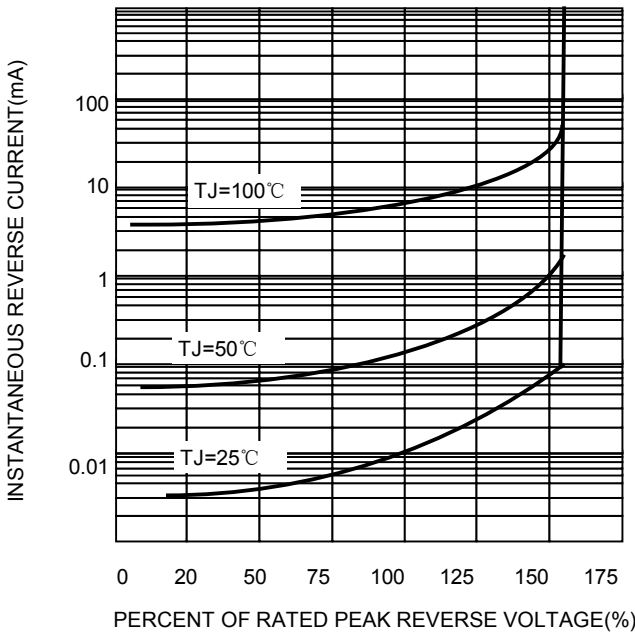


FIG.4-TYPICAL FORWARD CHARACTERISTICS

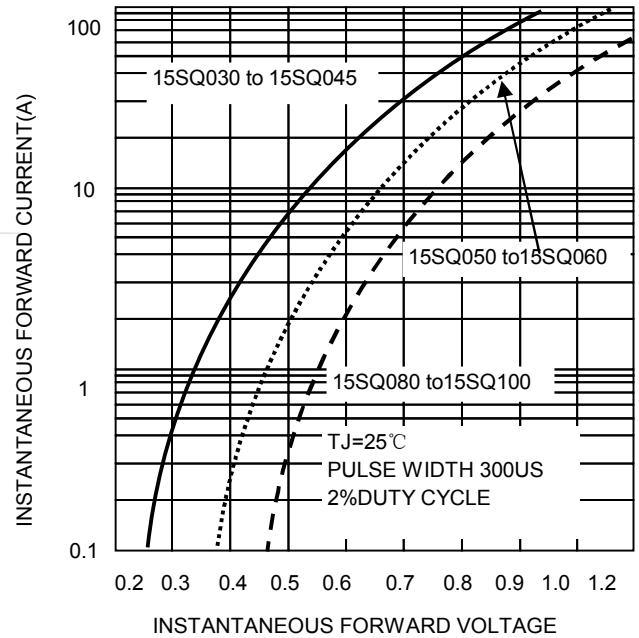


FIG.5-TYPICAL JUNCTION CAPACITANCE

