

SOT-23 SCHOTTKY DIODE

FEATURES

- * Low Turn-on voltage
- * Fast switching
- * Ultra-small surface mount package
- * Also available in lead free version

MECHANICAL DATA

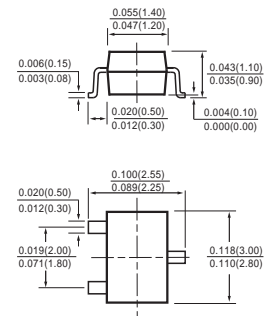
- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.008 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.



SOT-23



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (@ TA = 25°C unless otherwise noted)

| RATINGS | SYMBOL | VALUE | UNITS |
|----------------------------------------------|------------------|-------------|-------|
| DC Voltage | V _R | 70 | V |
| Forward Continuous Current | I _F | 70 | mA |
| Max. Steady State Power Dissipation @TA=25°C | P _D | 200 | mW |
| Max. Operating Temperature Range | T _J | 150 | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | °C |

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

| CHARACTERISTICS | SYMBOL | MIN. | TYP. | MAX. | UNITS |
|---------------------------------------------------------------------------------------------------------------------------|--------------------|------|------|------|-------|
| Reverse breakdown voltage (I _R =10μA) | V _{(BR)R} | 70 | - | - | V |
| Reverse voltage leakage current (V _R =50V) | I _R | - | - | 100 | nA |
| Forward voltage (I _F =1mA) | V _F | - | - | 410 | mV |
| (I _F =15mA) | | | | 1000 | |
| Diode capacitance (V _R =0,f=1MHz) | C _D | - | - | 2 | pF |
| Reveres recovery time (I _F =I _R =10mA,I _{rr} =0.1 X I _R , R _L =100Ω) | t _{rr} | - | - | 5 | nS |

RATING AND CHARACTERISTICS CURVES (BAS70A)

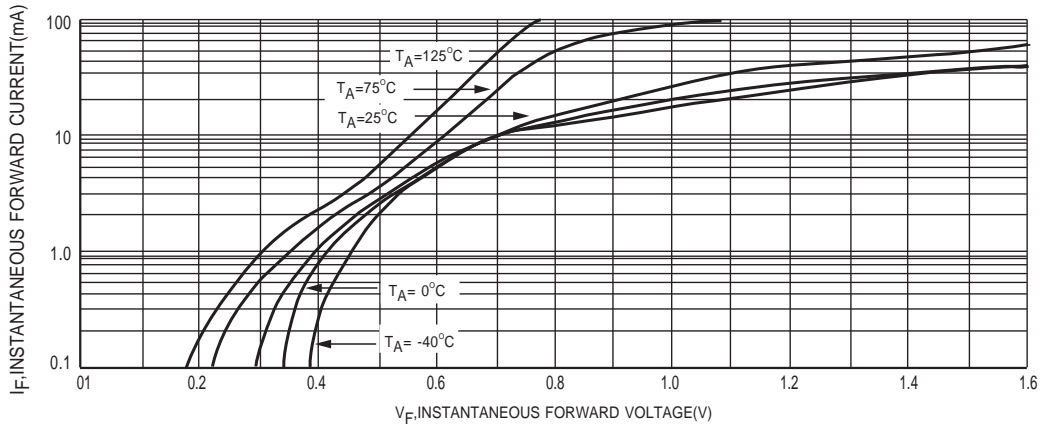


Figure 1 Typical Forward Characteristics

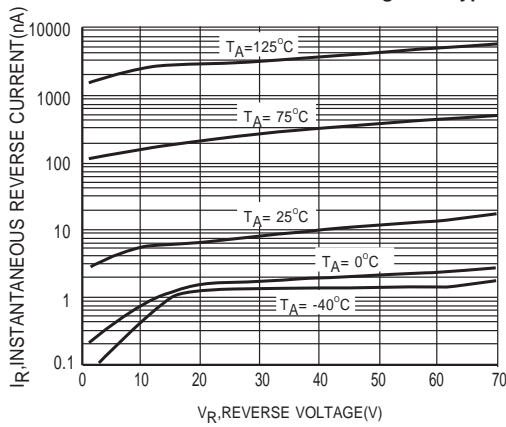


Figure 2 Typical Reverse Characteristics

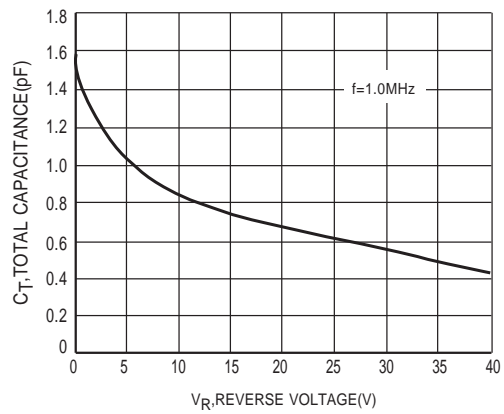


Figure 3 Typical Capacitance

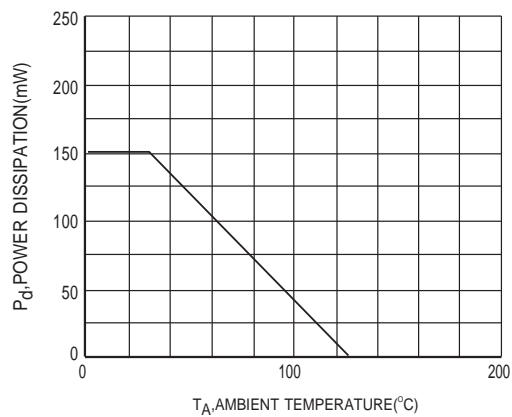


Figure 4 Power Derating Curve, Total Package

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