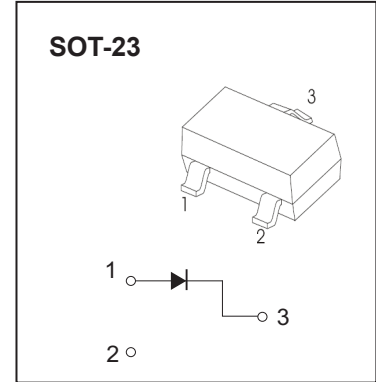
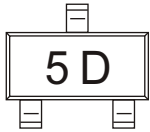


FEATURES

- Fast Switching Speed
- High Conductance
- Low Current Leakage
- Compliant to Halogen-free
- Suffix "-Q1" for AEC-Q101

MARKING: 5D



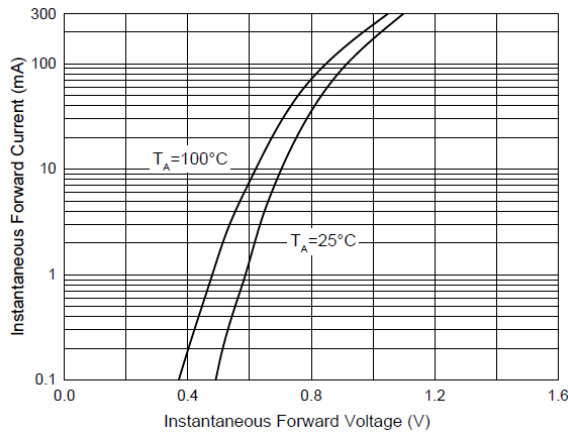
Maximum Ratings @Ta=25°C

| Parameter | Symbol | Limit | Unit |
|---|-----------------|----------|------|
| Peak Reverse Voltage | V_{RM} | 100 | V |
| Reverse Voltage | V_R | 75 | V |
| Average Rectified Output Current | I_O | 150 | mA |
| Non-Repetitive Peak Forward Surge Current @t=1s | I_{FSM} | 1 | A |
| Power Dissipation | P_D | 350 | mW |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 428 | °C/W |
| Junction Temperature | T_j | 150 | °C |
| Storage Temperature | T_{STG} | -55~+155 | °C |

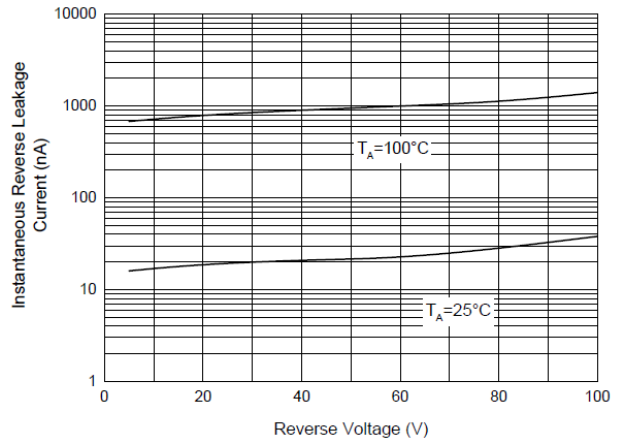
Electrical Characteristics@Ta=25°C

| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|------------------------------|----------|-----|-----|-----|------|-----------------------------------|
| Reverse Breakdown Voltage | V_R | 75 | | | V | $I_R=100\mu A$ |
| Forward Voltage | V_F | | | 855 | mV | $I_F=10mA$ |
| Reverse Current | I_R | | | 25 | nA | $V_R=20V$ |
| Typical Junction Capacitance | C_J | | | 2 | pF | $V_R=0, f=1MHz$ |
| Reverse Recovery Time | t_{rr} | | | 4 | nS | $I_F=10mA, V_R=6V, R_L=100\Omega$ |

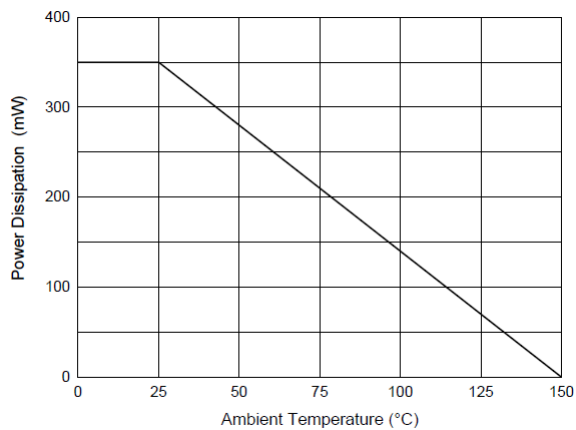
Typical Characteristics



Typical Instantaneous Forward Characteristics

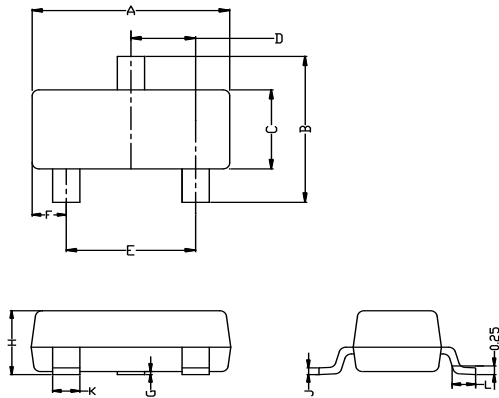


Typical Reverse Leakage Characteristics



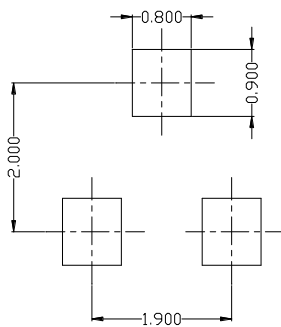
Power Derating Curve

SOT-23 Package Outline Dimensions



| Symbol | Dimensions In | | Dimensions In Inches | |
|--------|---------------|-------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 2.800 | 3.040 | 0.110 | 0.120 |
| B | 2.100 | 2.640 | 0.083 | 0.104 |
| C | 1.200 | 1.400 | 0.047 | 0.055 |
| D | 0.890 | 1.030 | 0.035 | 0.041 |
| E | 1.780 | 2.050 | 0.070 | 0.081 |
| F | 0.450 | 0.600 | 0.018 | 0.024 |
| G | 0.013 | 0.100 | 0.001 | 0.004 |
| H | 0.900 | 1.110 | 0.035 | 0.044 |
| J | 0.085 | 0.180 | 0.003 | 0.007 |
| K | 0.370 | 0.510 | 0.015 | 0.020 |
| L | 0.300 | 0.500 | 0.012 | 0.020 |

SOT-23 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.