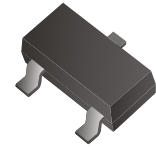


CDBV3-40/S/C/A-G

Reverse Voltage: 40 Volts
Forward Current: 200 mA
RoHS Device



Features

- Design for mounting on small surface.
- High speed switching application, circuit protection.
- Low turn-on voltage.

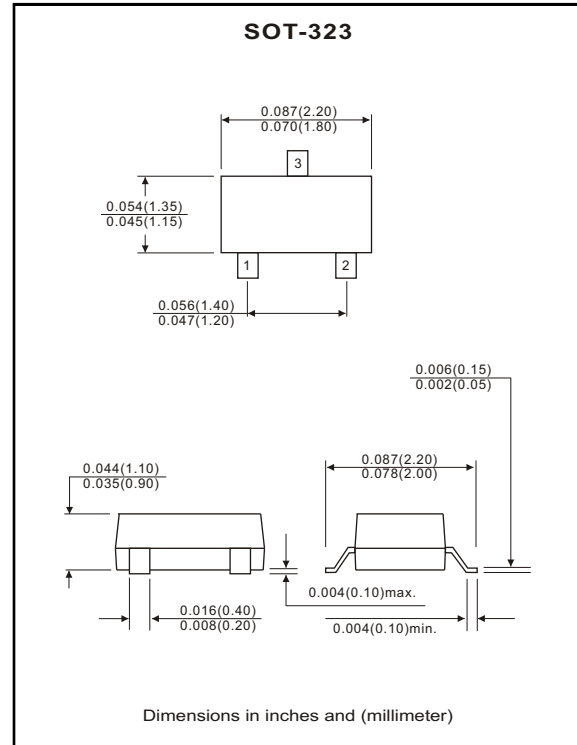
Mechanical data

- Case: SOT-323, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Approx. weight: 0.006 grams

Circuit diagram



CDBV3-40-G Marking Code:43 CDBV3-40S-G Mark Code:44 CDBV3-40C-G Marking Code: 45 CDBV3-40A-G Marking Code: 46



Maximum Ratings (at Ta=25°C unless otherwise noted)

| Parameter | Symbol | Value | Units |
|---|---------------------------------|-------------|-------|
| Peak repetitive peak reverse voltage Working peak reverse voltage DC blocking voltage | V_{RRM} V_{RWM} V_R | 40 | V |
| Forward continuous current | I_{FM} | 200 | mA |
| Peak surge forward current (T=1.0sec) | I_{FSM} | 0.6 | A |
| Power dissipation | P_D | 150 | mW |
| Thermal resistance, junction to ambient | $R_{\theta JA}$ | 833 | °C/W |
| Junction temperature | T_J | 125 | °C |
| Storage temperature | T_{STG} | -65 to +125 | °C |

Electrical Characteristics (at Ta=25°C unless otherwise noted)

| Parameter | Symbol | Conditions | Min. | Max. | Units |
|---------------------------------|----------|--|------|-------------|-------|
| Reverse breakdown voltage | V_{BR} | $I_R=10\mu A$ | 40 | | V |
| Reverse voltage leakage current | I_R | $V_R=30V$ | | 200 | nA |
| Forward voltage | V_F | $I_F=1mA$ $I_F=40mA$ | | 380 1000 | mV |
| Diode capacitance | C_D | $V_R=0V, f=1.0MHz$ | | 5 | pF |
| Reverse recovery time | T_{rr} | $I_{rr}=1mA, I_F=I_R=10mA,$ $R_L=100\Omega$ | | 5 | nS |

RATING AND CHARACTERISTIC CURVES (CDBV3-40/S/C/A-G)

Fig.1 Forward Characteristics

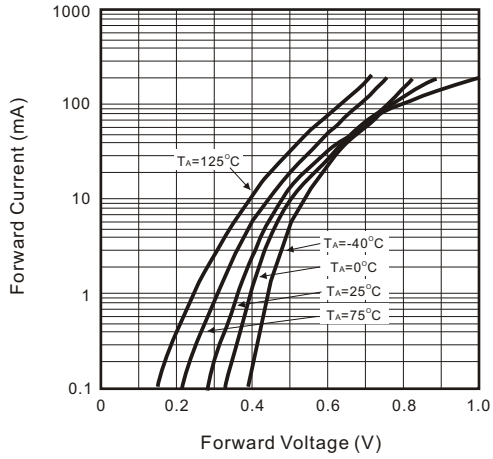


Fig.2 Reverse Characteristics

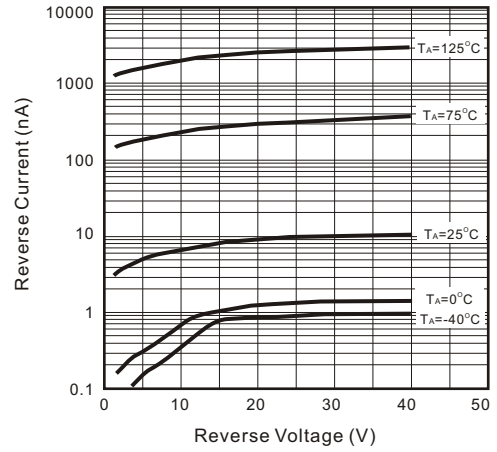


Fig.3 Capacitance Between Terminals Characteristics

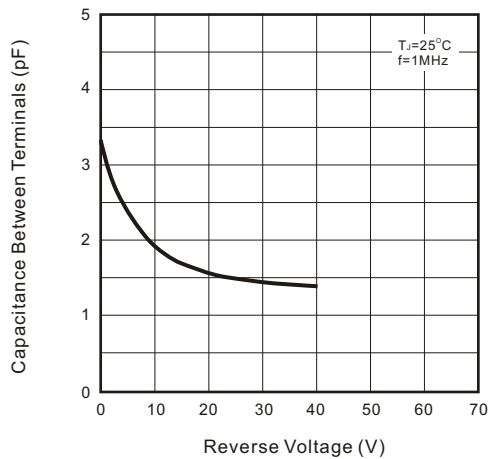


Fig.4 Power Derating Curve

