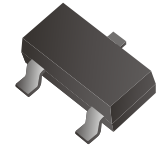


## CDBV3-40/S/C/A-G

**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.

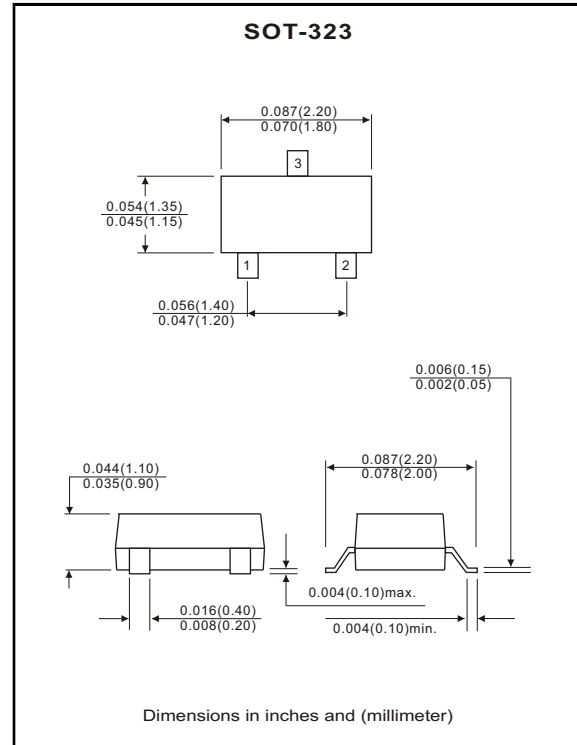
### Mechanical data

- 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

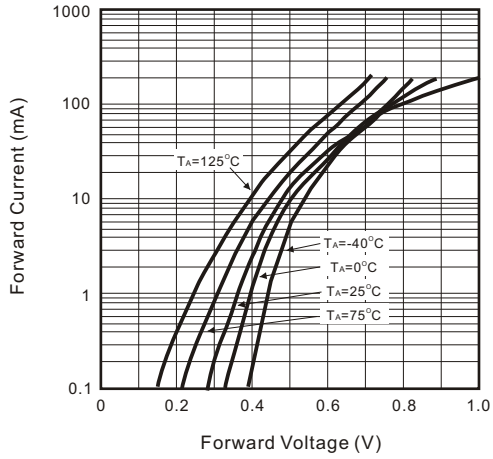


Fig.2 Reverse Characteristics

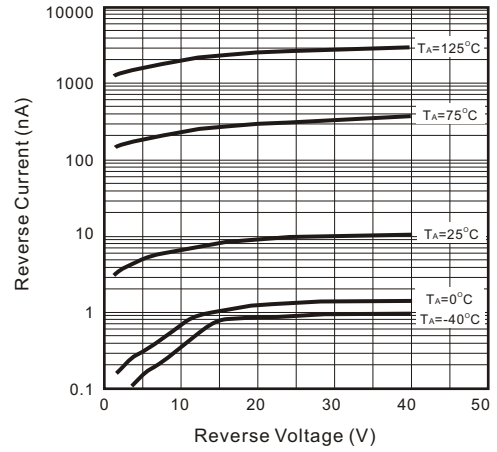


Fig.3 Capacitance Between Terminals Characteristics

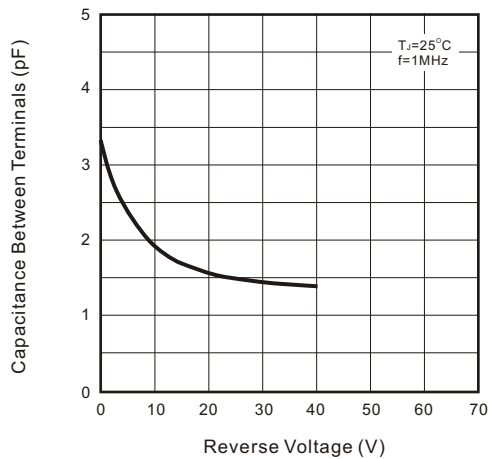


Fig.4 Power Derating Curve

