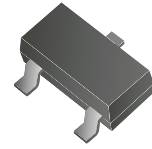


## CDBT-70/S/C/A-G

**Reverse Voltage: 70 Volts**  
**Forward Current: 70 mA**  
**RoHS Device**



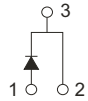
### Features

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

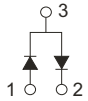
### Mechanical data

- Case: SOT-23, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Approx. weight: 0.008 grams

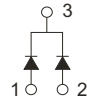
### Circuit diagram



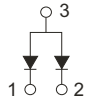
CDBT-70-G



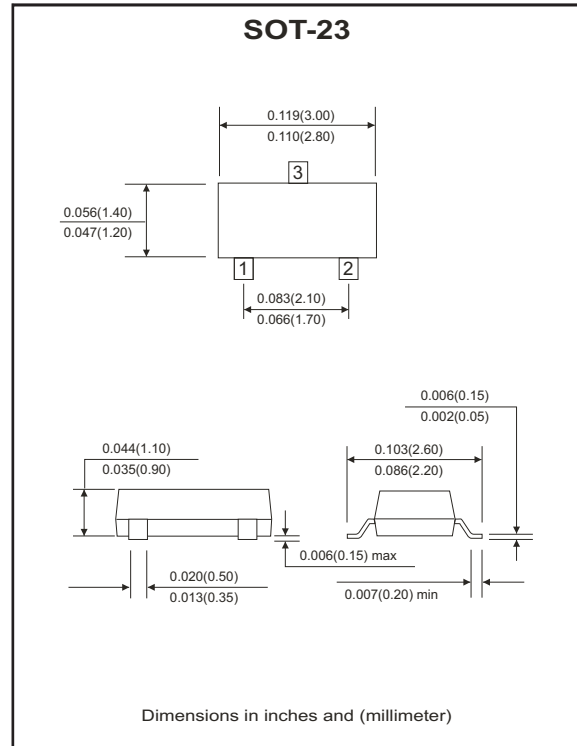
CDBT-70S-G



CDBT-70C-G



CDBT-70A-G



### Maximum Ratings and Electrical Characteristics

(at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Value	Units
Repetitive peak reverse voltage	V <sub>RRM</sub>		70	V
Reverse voltage	V <sub>R</sub>		70	V
Forward current	I <sub>F</sub>		70	mA
Peak surge forward current	I <sub>FSM</sub>	T<1.0 sec	0.1	A
Power dissipation	P <sub>d</sub>		200	mW
Maximum forward voltage	V <sub>F</sub>	@I <sub>F</sub> =1.0mA, t <sub>p</sub> <300μS @I <sub>F</sub> =15mA, t <sub>p</sub> <300μS	0.41 1.0	V
Maximum reverse current	I <sub>R</sub>	@V <sub>R</sub> =50V	0.1	μA
Maximum reverse recovery time	T <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, R <sub>L</sub> =100Ω	2	nS
Maximum diode capacitance	C <sub>T</sub>	V <sub>R</sub> =0V, f=1.0MHz	5	pF
Maximum junction temperature	T <sub>J</sub>		125	°C
Storage temperature	T <sub>STG</sub>		-65 to +150	°C

## RATING AND CHARACTERISTIC CURVES (CDBT-70/S/C/A-G)

Fig.1 Forward Characteristics

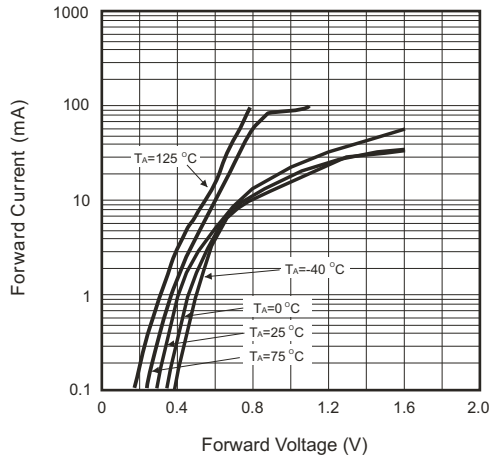


Fig.2 Reverse Characteristics

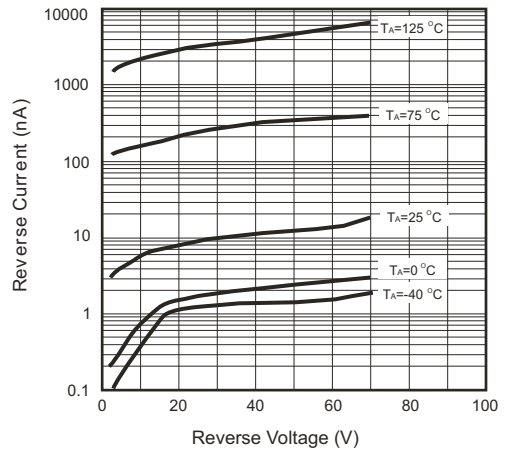


Fig.3 Capacitance Between Terminals Characteristics

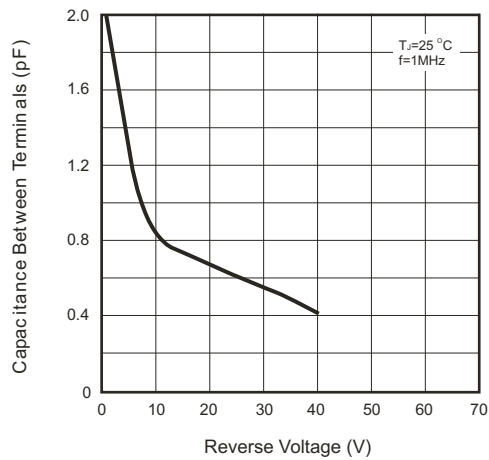


Fig.4 Power Derating Curve

