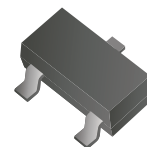


CDBT-70/S/C/A-G

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


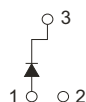
Features

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

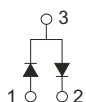
Mechanical data

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

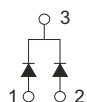
Circuit diagram



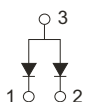
CDBT-70-G



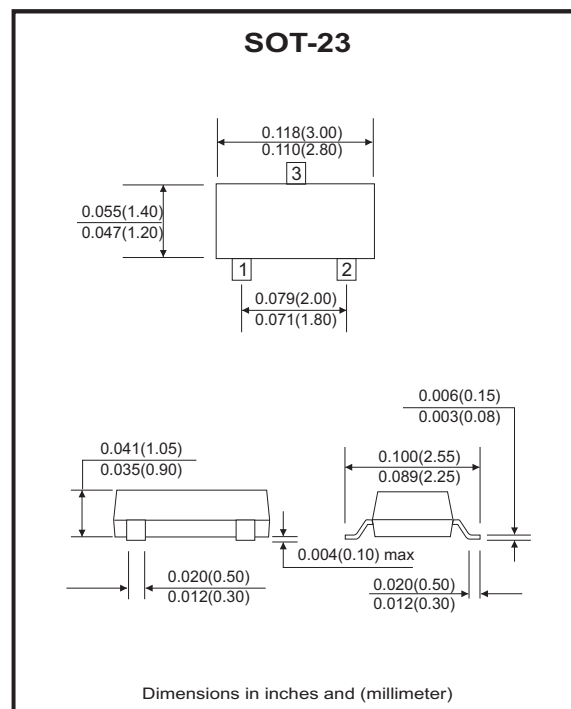
CDBT-70S-G



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_{RRM}		70	V
Reverse voltage	V_R		70	V
Forward continuous current	I_F		70	mA
Non-Repetitive peak forward surge current	I_{FSM}	T=1.0 sec	100	mA
Power dissipation	P_D		200	mW
Maximum forward voltage	V_F	@ $I_F=1.0\text{mA}$ @ $I_F=15\text{mA}$	410 1000	mV
Maximum reverse leakage current	I_R	@ $V_R=50\text{V}$	100	nA
Maximum reverse recovery time	T_{rr}	$I_F=I_R=10\text{mA}$, $R_L=100\Omega$, $I_{rr}=0.1 \cdot I_R$	5	nS
Maximum diode capacitance	C_D	$V_R=0\text{V}$, $f=1.0\text{MHz}$	2	pF
Thermal Resistance Junction to Ambient	$R_{\theta JA}$		500	°C/W
Junction temperature	T_J		125	°C
Storage temperature	T_{STG}		-55 to +150	°C

Company reserves the right to improve product design , functions and reliability without notice.

REV:B

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

Fig.1 - Forward Characteristics

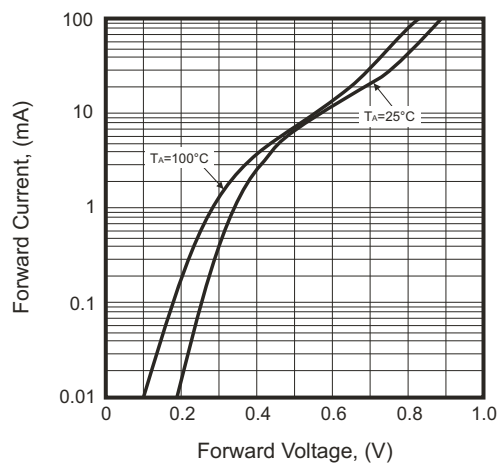


Fig.2 - Reverse Characteristics

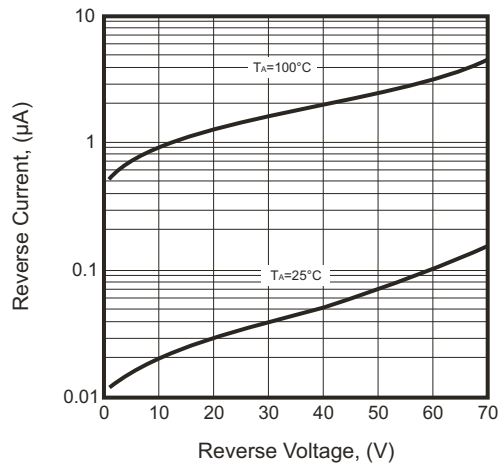


Fig.3 - Capacitance Characteristics

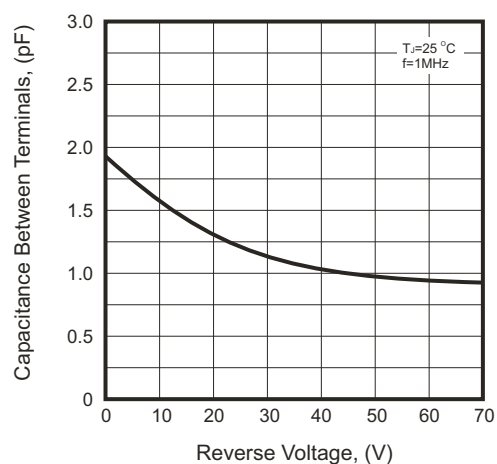
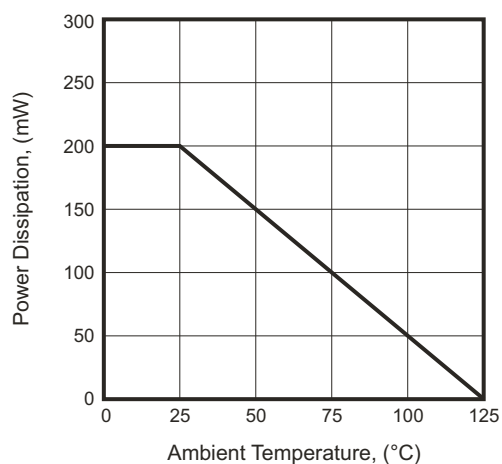
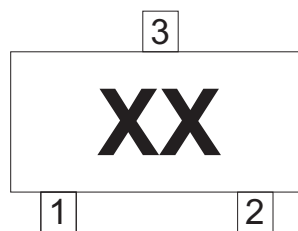


Fig.4 - Power Derating Curve



Marking Code

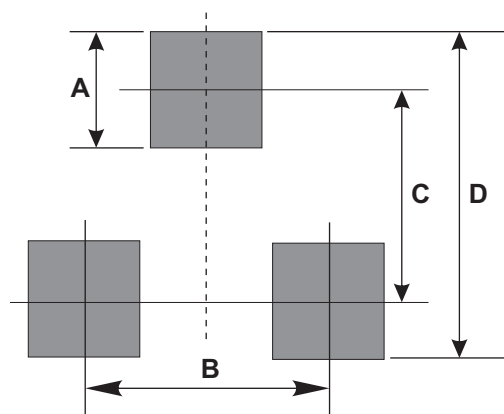
Part Number	Marking Code
CDBT-70-G	73
CDBT-70A-G	76
CDBT-70C-G	75
CDBT-70S-G	74



xx = Product type marking code

Suggested PAD Layout

SIZE	SOT-23	
	(mm)	(inch)
A	0.80	0.031
B	1.90	0.075
C	2.02	0.080
D	2.82	0.111



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-23	3,000	7