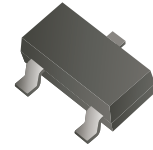


CDBT-70/S/C/A-G

Reverse Voltage: 70 Volts

Forward Current: 70 mA

RoHS Device



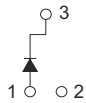
Features

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

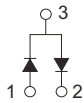
Mechanical data

- Case: SOT-23, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Weight: 0.008 grams (approx.).

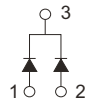
Circuit Diagram



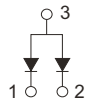
CDBT-70-G



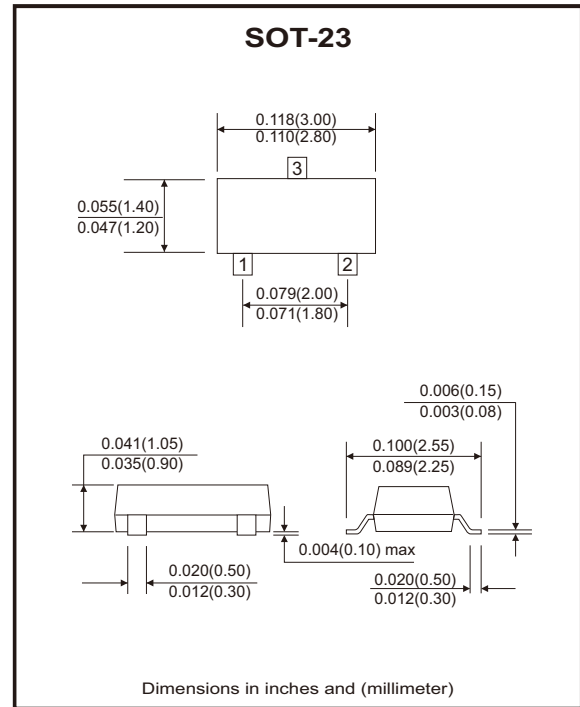
CDBT-70S-G



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	@ $I_F=1.0mA$ @ $I_F=15mA$	410 1000	mV
Maximum reverse leakage current	I_R	@ $V_R=50V$	100	nA
Maximum reverse recovery time	T_{rr}	$I_F=I_R=10mA$, $R_L=100\Omega$, $I_{rr}=0.1 \cdot I_R$	5	nS
Maximum diode capacitance	C_D	$V_R=0V$, $f=1.0MHz$	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.

Rating and Characteristic Curves (CDBT-70/S/C/A-G)

Fig.1 - Forward Characteristics

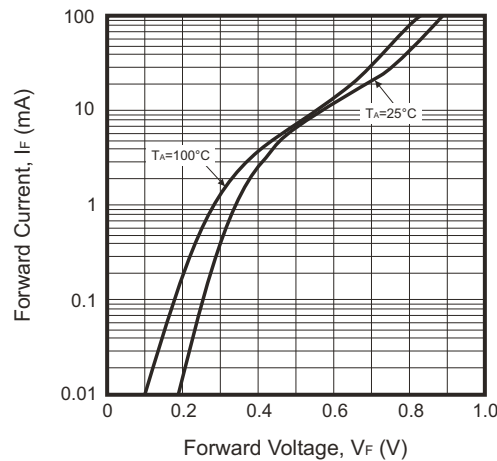


Fig.2 - Reverse Characteristics

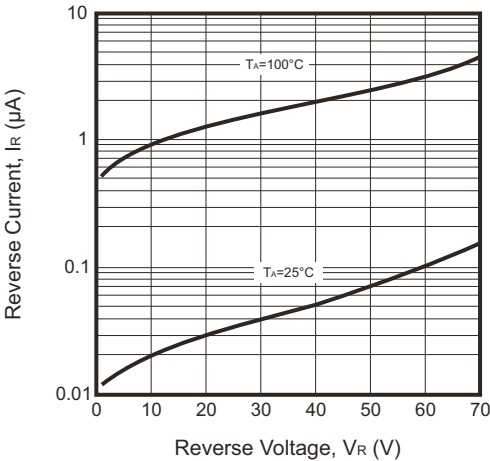


Fig.3 - Capacitance Characteristics

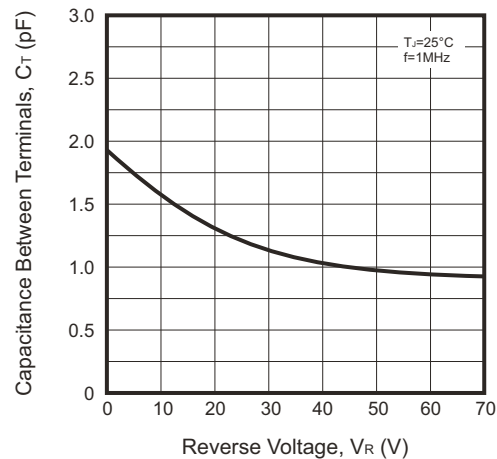
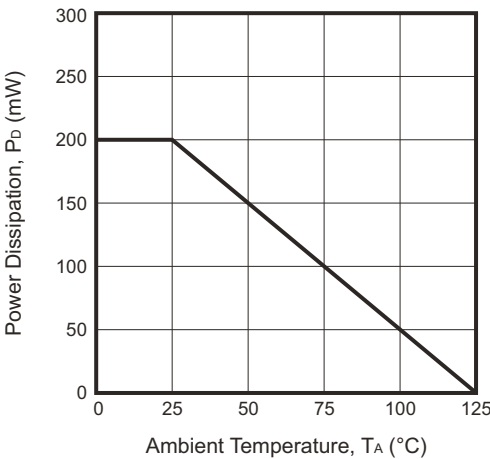
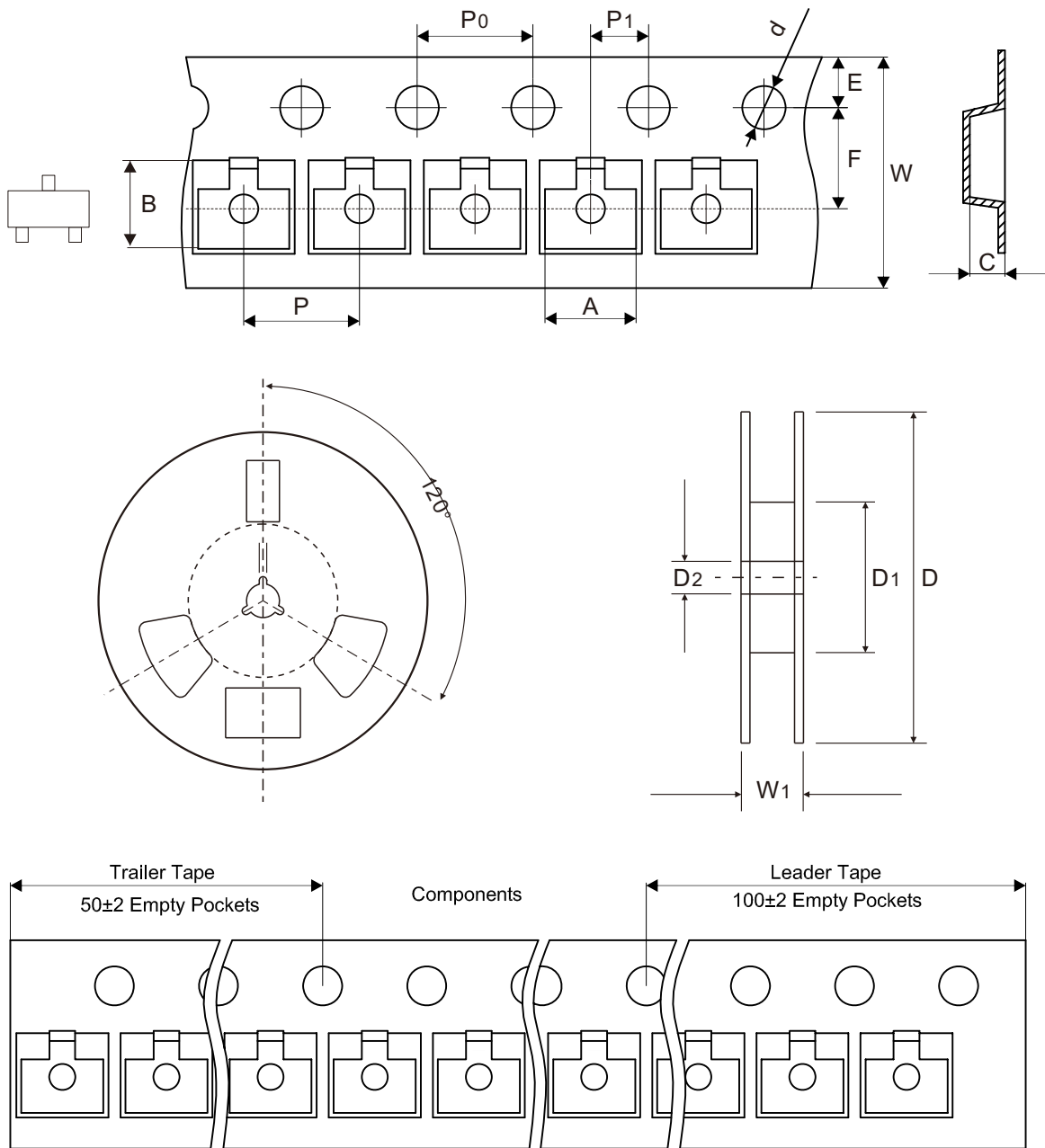


Fig.4 - Power Derating Curve



Reel Taping Specification



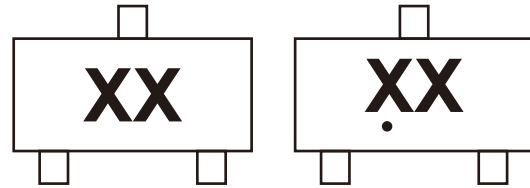
SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOT-23	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 + 0.30 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 + 0.012 - 0.004	0.484 ± 0.039

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

Marking Code

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

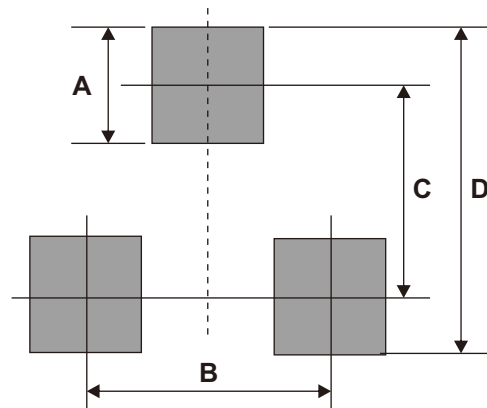


Solid dot = Control code
xx = Product type marking code

Suggested P.C.B. 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

Note: 1. The pad layout is for reference purposes only.



Standard Packaging

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