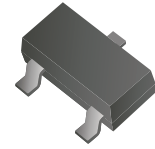


## CDBT-54/S/C/A-HF

**Reverse Voltage: 30 Volts**  
**Forward Current: 200 mA**  
**RoHS Device**  
**Halogen free**



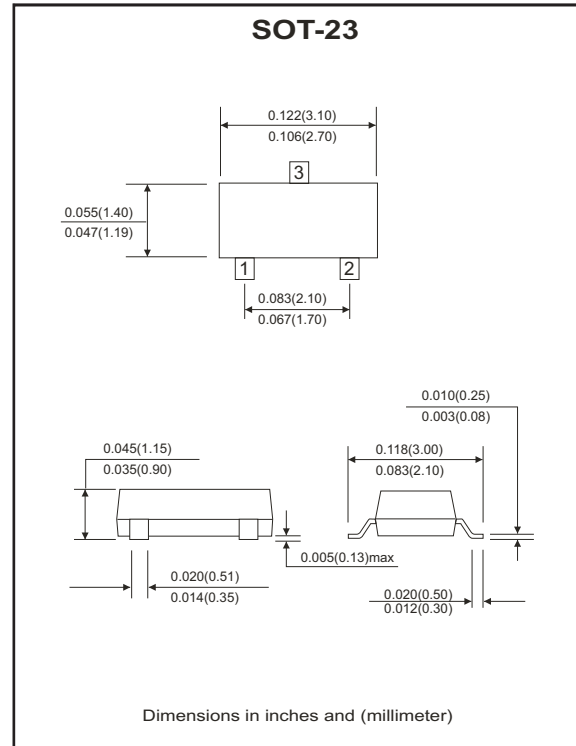
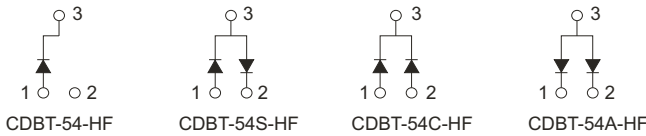
### Features

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

### Mechanical data

- Case: SOT-23, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Approx. weight: 0.008 grams
- Packing : 3,000 pieces per 7" reel.

### Circuit diagram



### Maximum Ratings and Electrical Characteristics

(at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Value	Units
Repetitive peak reverse voltage	$V_{RRM}$		30	V
Reverse voltage	$V_R$		30	V
Forward current	$I_F$		200	mA
Peak surge forward current	$I_{FSM}$	T<1.0 sec	600	mA
Power dissipation	$P_D$		225	mW
Maximum forward voltage	$V_F$	@ $I_F=0.1mA$ @ $I_F=1mA$ @ $I_F=10mA$ @ $I_F=30mA$ @ $I_F=100mA$	0.24 0.32 0.40 0.50 1.00	V
Maximum reverse current	$I_R$	@ $V_R=25V$	2	$\mu A$
Maximum reverse recovery time	$T_{rr}$	$I_F=I_R=10mA, R_L=100\Omega$	5	nS
Maximum diode capacitance	$C_J$	$V_R=1V, f=1.0MHz$	10	pF
Maximum junction temperature	$T_J$		125	°C
Storage temperature	$T_{STG}$		-55 to +125	°C

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

REV:B

## RATING AND CHARACTERISTIC CURVES (CDBT-54/S/C/A-HF)

Fig.1 - Forward Characteristics

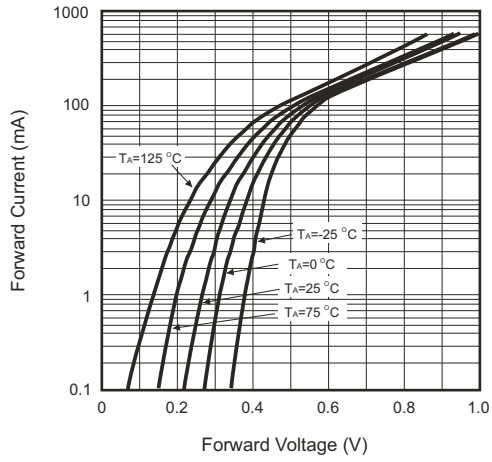


Fig.2 - Reverse Characteristics

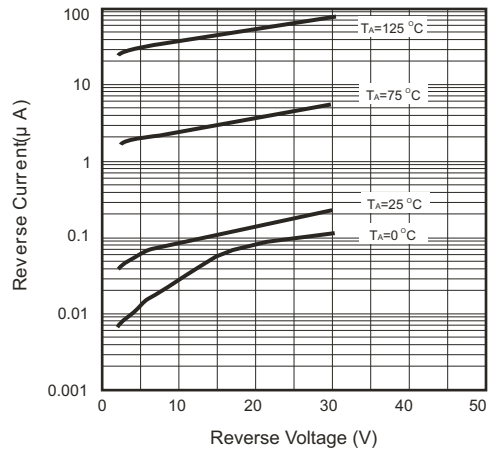


Fig.3- Capacitance between terminals characteristics

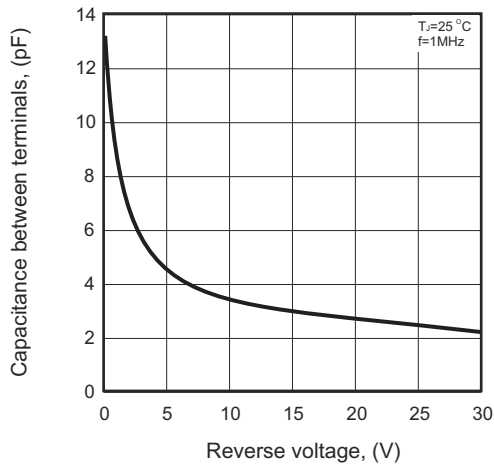
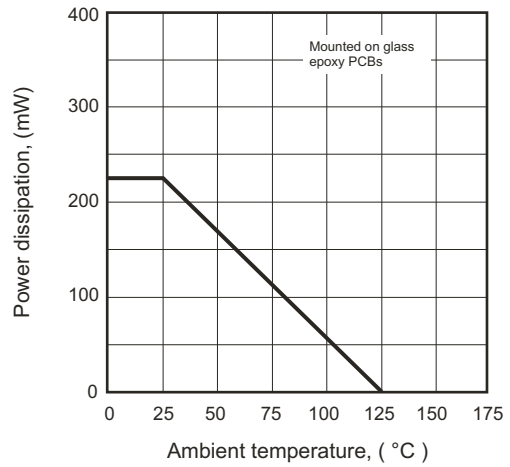


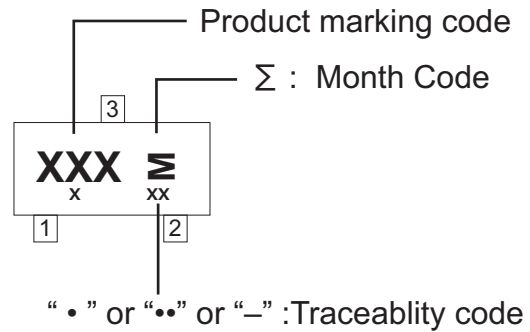
Fig.4- Power derating curve



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

## Marking Code

Part Number	Marking Code	
CDBT-54-HF	KL1	JV3 ≍
CDBT-54A-HF	KL2	B6 ≍
CDBT-54C-HF	KL3	5C ≍
CDBT-54S-HF	KL4	LD3 ≍



## Month Code:

Month	Odd Year (per A.D.)	Even Year (per A.D.)
Jan	1	E
Feb	2	F
Wer	3	H
Apr	4	J
May	5	K
Jun	6	L

Month	Odd Year (per A.D.)	Even Year (per A.D.)
Jul	7	N
Aug	8	P
Sep	9	U
Oct	T	X
Nov	V	Y
Dec	C	Z

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