



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



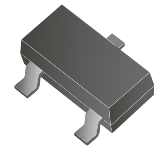
CDBT-54/S/C/A-HF

Reverse Voltage: 30 Volts

Forward Current: 200 mA

RoHS Device

Halogen free



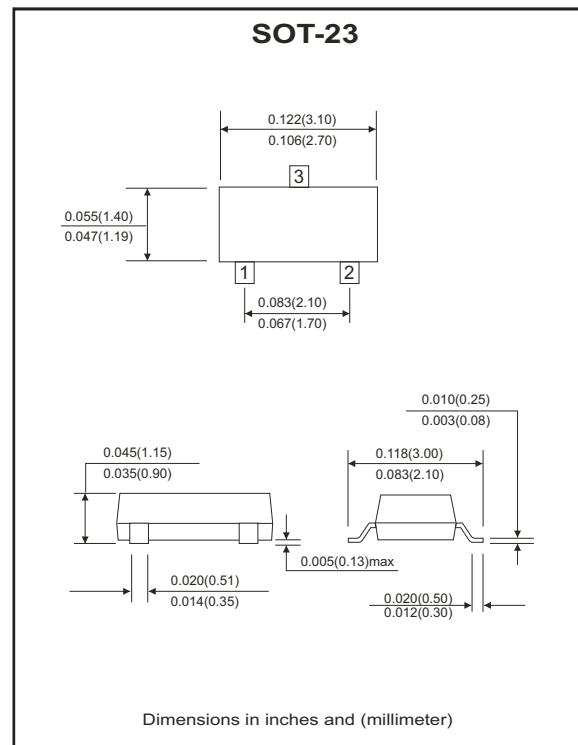
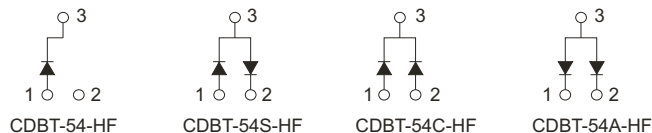
Features

- 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	$@I_F = 0.1$ mA $@I_F = 1$ mA $@I_F = 10$ mA $@I_F = 30$ mA $@I_F = 100$ mA	0.24 0.32 0.40 0.50 1.00	V
Maximum reverse current	I_R	$@V_R = 25$ V	2	μ A
Maximum reverse recovery time	T_{rr}	$I_F = I_R = 10$ mA, $R_L = 100\Omega$	5	nS
Maximum diode capacitance	C_J	$V_R = 1$ V, $f = 1.0$ MHz	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

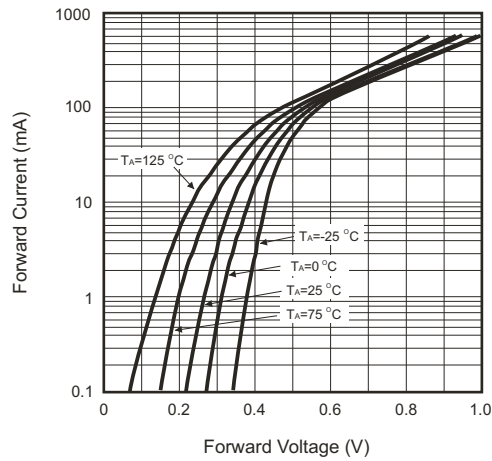


Fig.2 - Reverse Characteristics

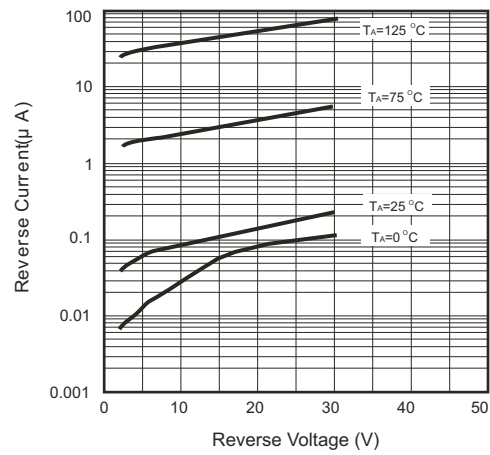


Fig.3- Capacitance between terminals characteristics

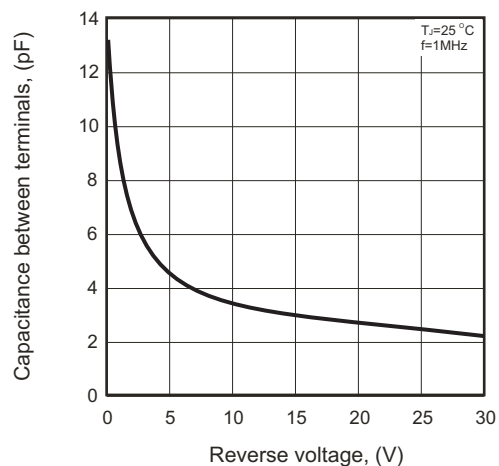
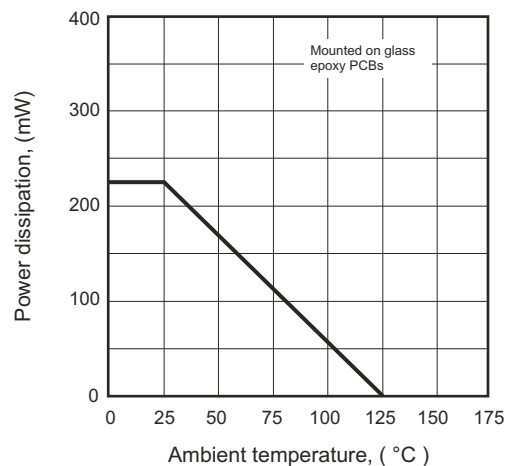


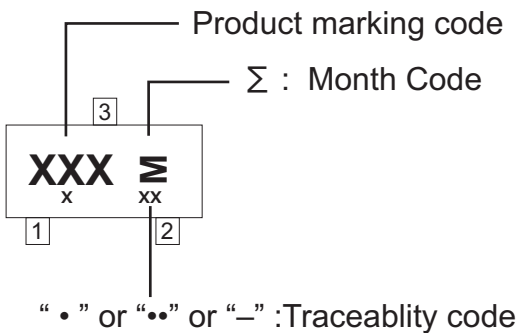
Fig.4- Power derating curve



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

Marking Code

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



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