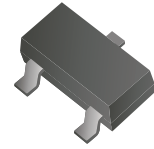


CDBT-54/S/C/A-HF

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



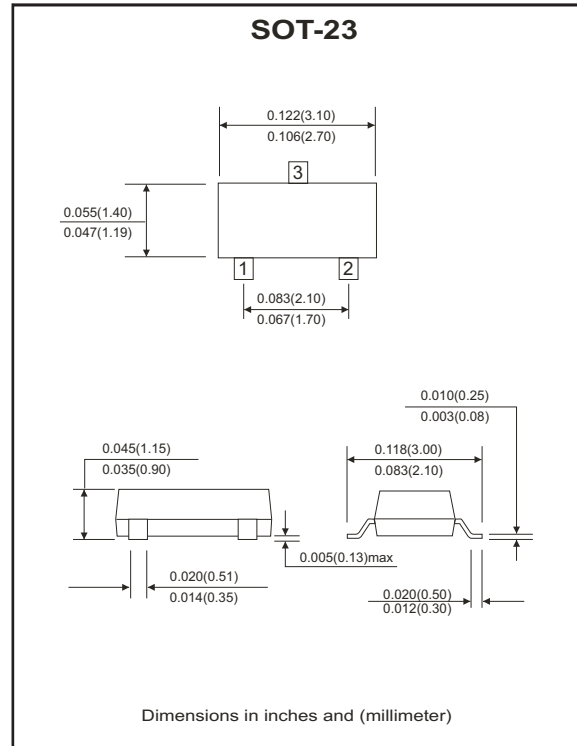
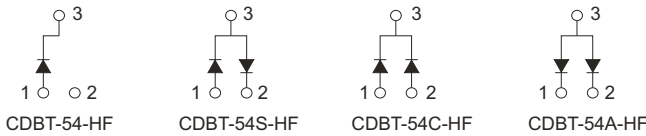
Features

- 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 | μA |
| 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

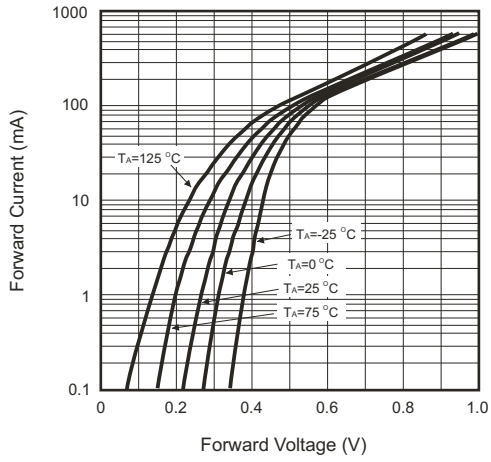


Fig.2 - Reverse Characteristics

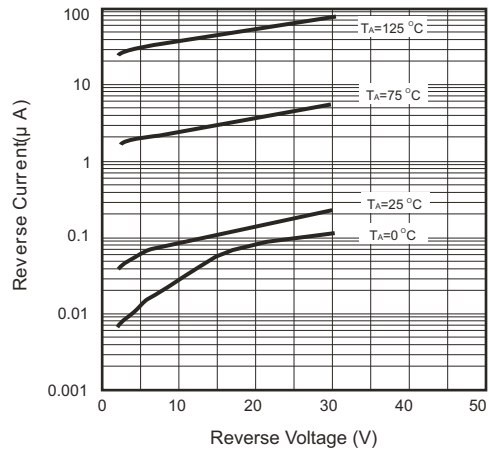


Fig.3- Capacitance between terminals characteristics

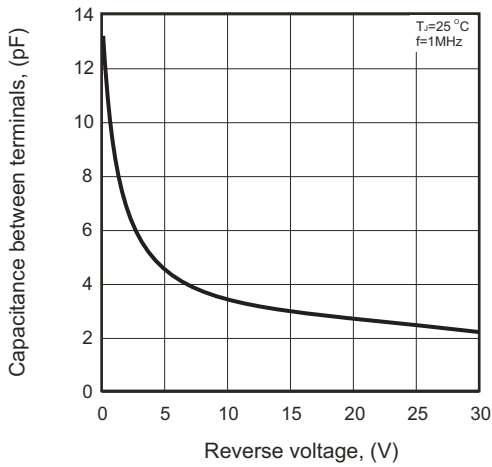
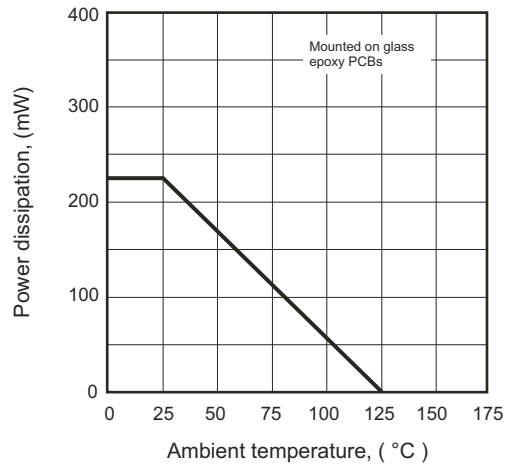


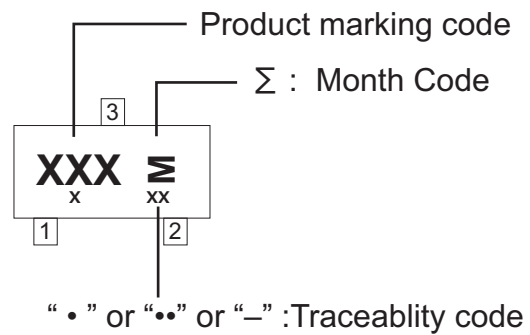
Fig.4- Power derating curve



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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 |

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