

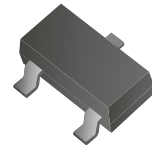
CDBH3-54/S/C/A-HF

Reverse Voltage: 30 Volts

Forward Current: 200 mA

RoHS Device

Halogen Free



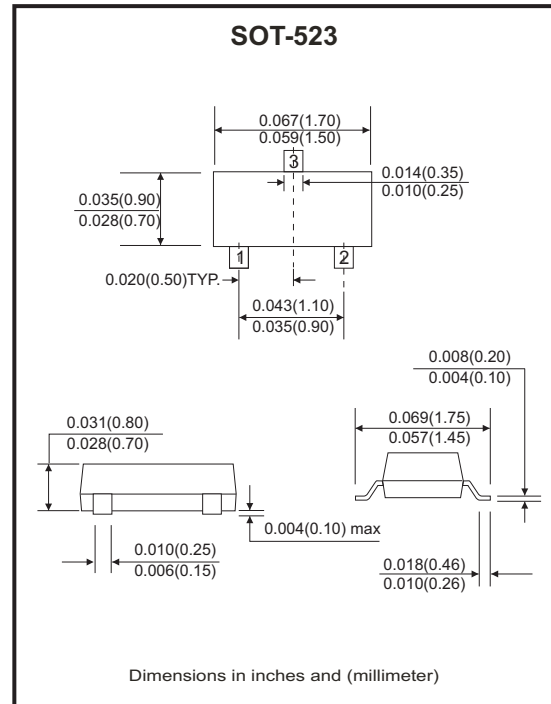
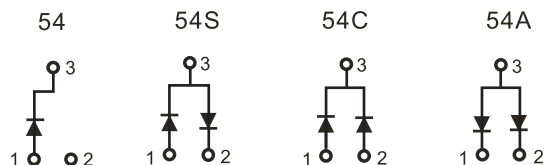
Features

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

Mechanical data

- Case: SOT-523, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Weight: 0.002 grams(approx.)

Circuit diagram



Maximum Ratings and Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Condition	Symbol	Value	Unit
Repetitive peak reverse voltage		V_{RRM}	30	V
Reverse voltage		V_R	30	V
Forward continue current		I_{FM}	200	mA
Surge peak forward current	$T < 1.0 \text{ sec}$	I_{FSM}	0.6	A
Power dissipation		P_d	150	mW
Maximum forward voltage	@ $I_F = 0.1 \text{ mA}$ @ $I_F = 1 \text{ mA}$ @ $I_F = 10 \text{ mA}$ @ $I_F = 30 \text{ mA}$ @ $I_F = 100 \text{ mA}$	V_F	0.24 0.32 0.40 0.50 1.00	V
Maximum reverse current	@ $V_R = 25 \text{ V}$	I_R	2.0	μA
Max reverse recovery time	$I_F = I_R = 10 \text{ mA}$, $R_L = 100 \text{ ohms}$	T_{rr}	5	nS
Maximum diode capacitance	$V_R = 1 \text{ V}$, $f = 1 \text{ MHz}$	C_T	10	pF
Max. junction temperature		T_j	125	°C
Storage temperature		T_{STG}	-65 to +125	°C

RATING AND CHARACTERISTIC CURVES (CDBH3-54/S/C/A-HF)

Fig.1 - Forward Characteristics

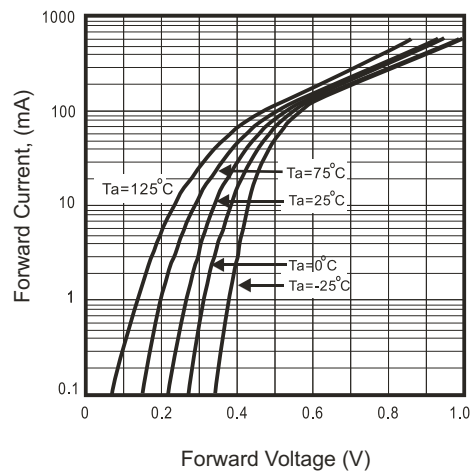


Fig.2 - Reverse Characteristics

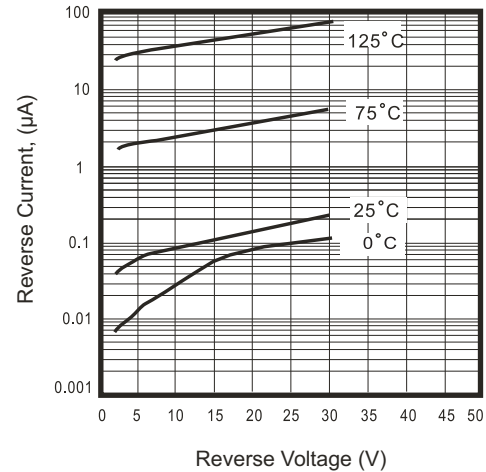


Fig.3 - Capacitance Between Terminals Characteristics

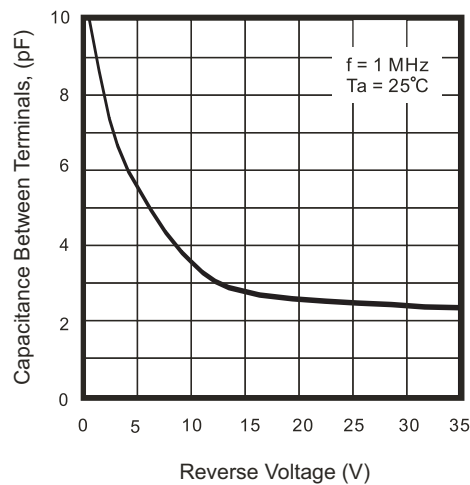
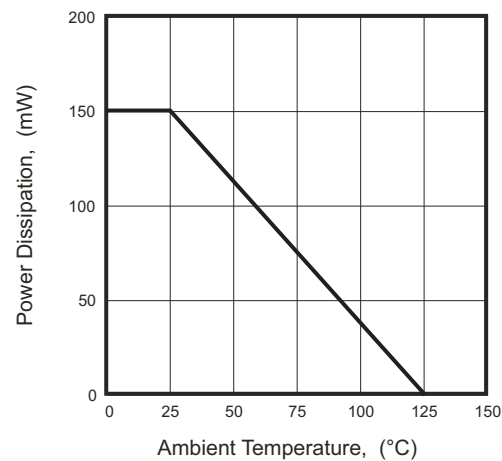
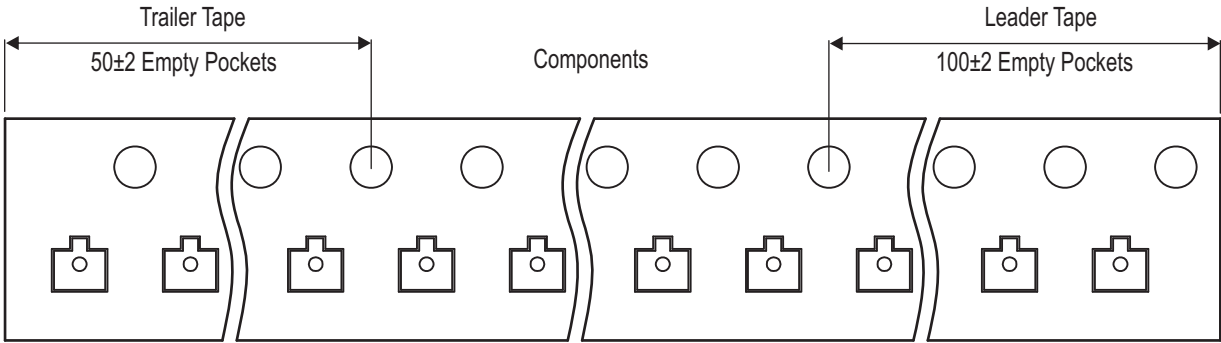
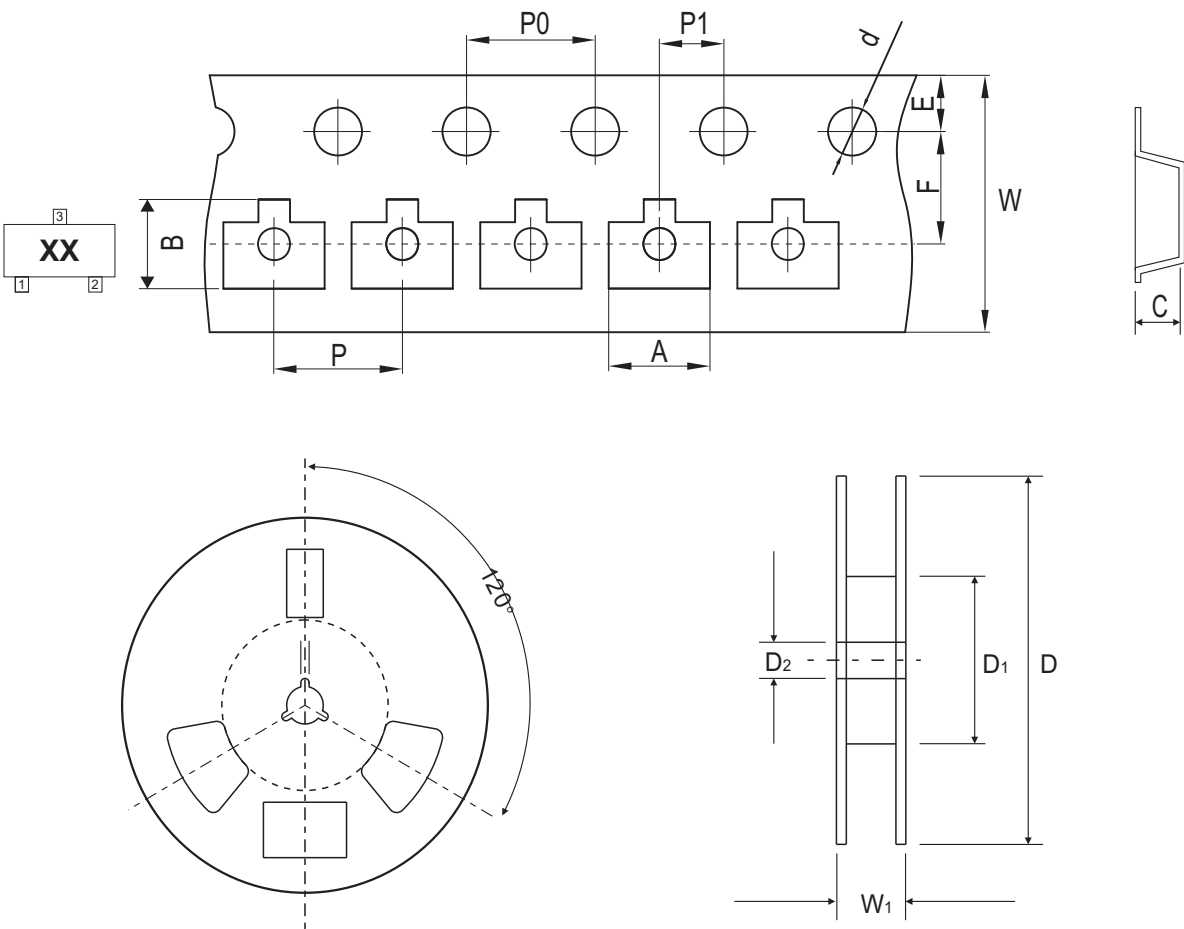


Fig.4 - Power Derating Curve



Reel Taping Specification

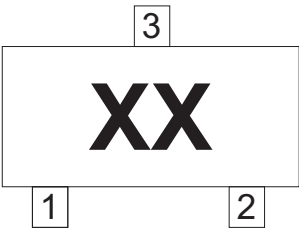


SOT-523	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.85 ± 0.05	1.85 ± 0.05	0.88 ± 0.05	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.073 ± 0.002	0.073 ± 0.002	0.035 ± 0.002	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOT-523	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

Marking Code

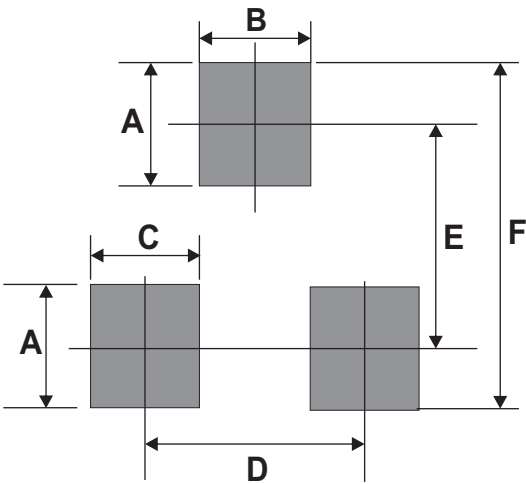
Part Number	Marking Code
CDBH3-54-HF	L1
CDBH3-54A-HF	L2
CDBH3-54C-HF	L3
CDBH3-54S-HF	L4



xx = Product type marking code

Suggested PAD Layout

SIZE	SOT-523	
	(mm)	(inch)
A	0.60	0.024
B	0.50	0.020
C	0.40	0.016
D	1.00	0.039
E	1.24	0.049
F	1.84	0.072



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-523	3,000	7

Mouser Electronics

Authorized Distributor

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[CDBH3-54A-HF](#) [CDBH3-54C-HF](#) [CDBH3-54-HF](#) [CDBH3-54S-HF](#)