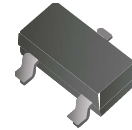


## CDBH3-54/S/C/A-G

**Reverse Voltage: 30 V**  
**Forward Current: 200 mA**  
**RoHS Device**



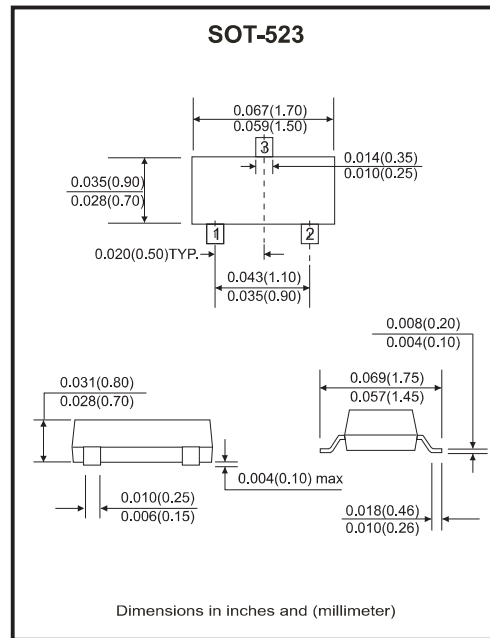
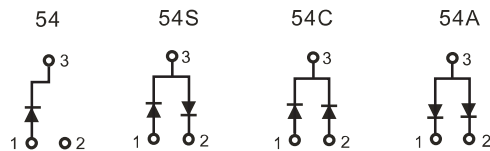
### Features

- 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 <sub>RRM</sub>	30	V
Reverse voltage		V <sub>R</sub>	30	V
Forward continue current		I <sub>FM</sub>	200	mA
Surge peak forward current	T < 1.0 sec	I <sub>FSM</sub>	0.6	A
Power dissipation		P <sub>d</sub>	150	mW
Maximum forward voltage	@ I <sub>F</sub> = 0.1 mA @ I <sub>F</sub> = 1 mA @ I <sub>F</sub> = 10 mA @ I <sub>F</sub> = 30 mA @ I <sub>F</sub> = 100mA	V <sub>F</sub>	0.24 0.32 0.40 0.50 1.00	V
Maximum reverse current	@ V <sub>R</sub> = 25V	I <sub>R</sub>	2.0	uA
Max reverse recovery time	I <sub>F</sub> =I <sub>R</sub> =10mA, R <sub>L</sub> =100 ohms	T <sub>rr</sub>	5	nS
Maximum diode capacitance	V <sub>R</sub> =1V, f=1MHz	C <sub>T</sub>	10	pF
Max. junction temperature		T <sub>j</sub>	125	°C
Storage temperature		T <sub>STG</sub>	-65 to +125	°C

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

Fig. 1 - Forward characteristics

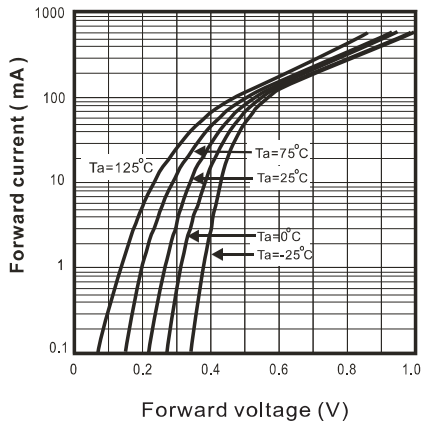


Fig. 2 - Reverse characteristics

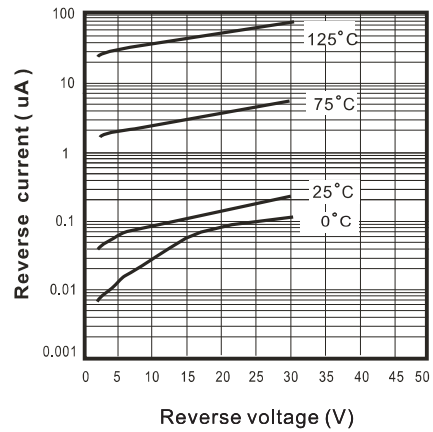


Fig. 3 - Capacitance between terminals characteristics

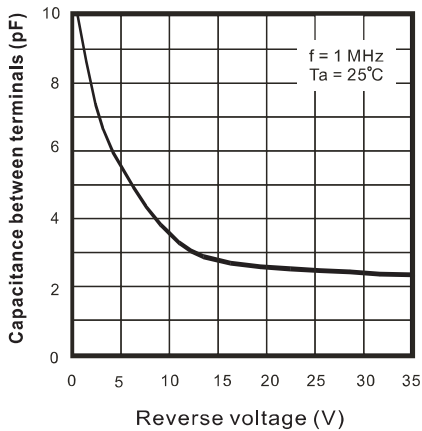
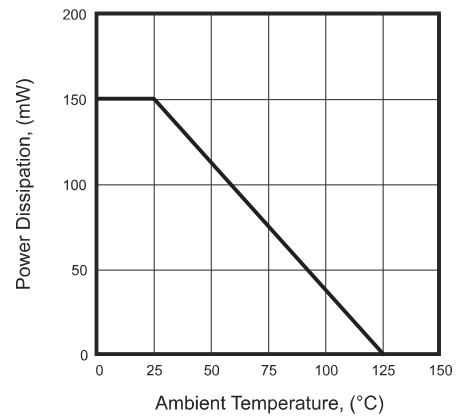
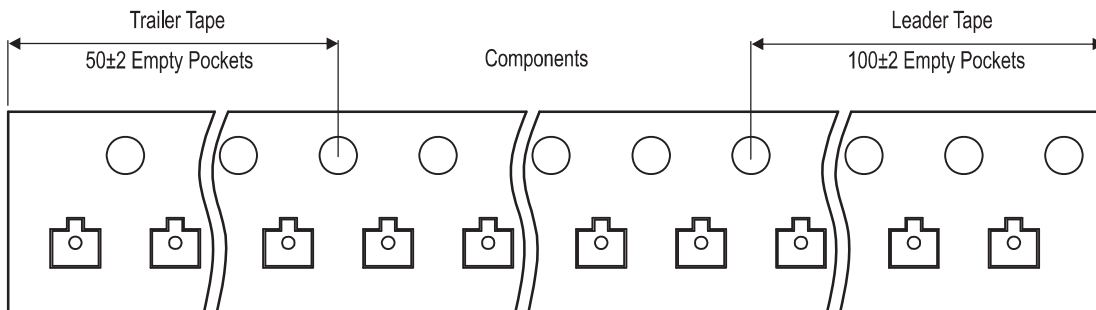
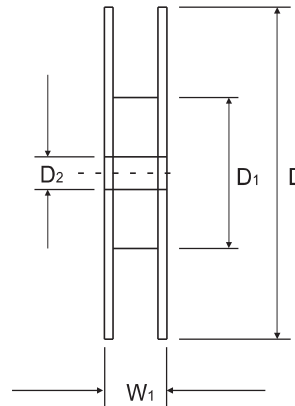
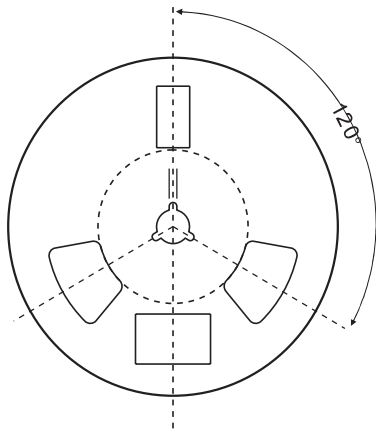
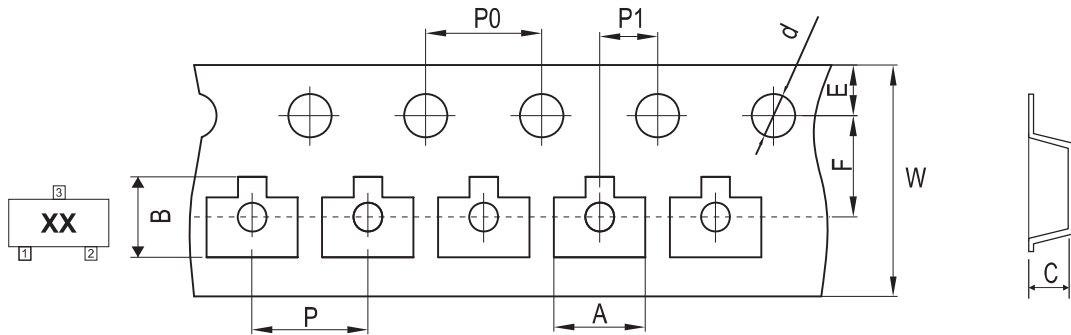


Fig.4 - Power Derating Curve



## Reel Taping Specification

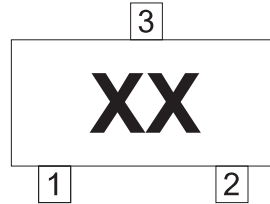


SOT-523	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.85 ± 0.05	1.85 ± 0.05	0.88 ± 0.05	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.073 ± 0.002	0.073 ± 0.002	0.035 ± 0.002	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

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

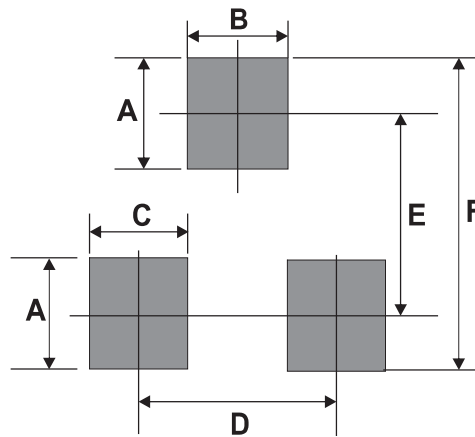
Part Number	Marking Code
CDBH3-54-G	L1
CDBH3-54A-G	L2
CDBH3-54C-G	L3
CDBH3-54S-G	L4



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