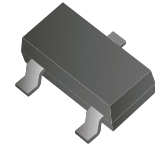


## CDBV3-54/S/C/A-G

Reverse Voltage: 30 Volts

Forward Current: 200 mA

RoHS Device



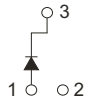
### Features

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

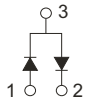
### Mechanical data

- Case: SOT-323, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- weight: 0.006 gram (approx)

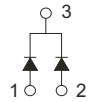
### Circuit diagram



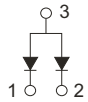
CDBV3-54-G



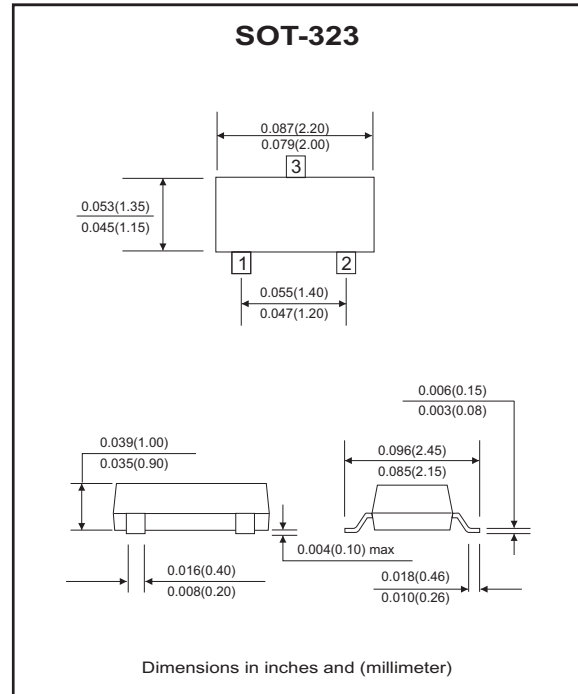
CDBV3-54S-G



CDBV3-54C-G



CDBV3-54A-G



### Maximum Ratings and Electrical Characteristics

(at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Value	Units
Minimum reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	30	V
Reverse voltage	$V_R$		30	V
Forward current	$I_F$		200	mA
Power dissipation	$P_D$		200	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	$T_{rr}$	$I_F=I_R=10mA$ , $I_{rr}=0.1 \times I_R$ $R_L=100\Omega$	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

## RATING AND CHARACTERISTIC CURVES (CDBV3-54/S/C/A-G)

Fig.1 - Forward Characteristics

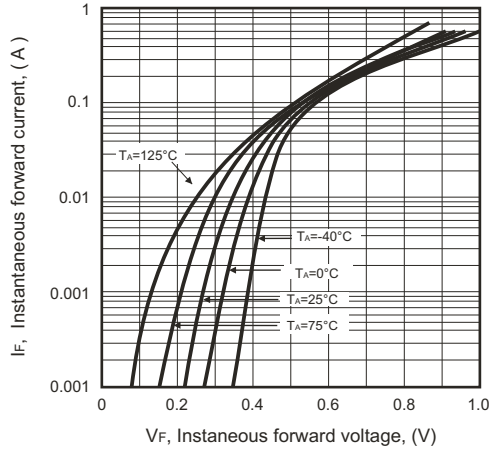


Fig.2 - Typical Reverse Characteristics

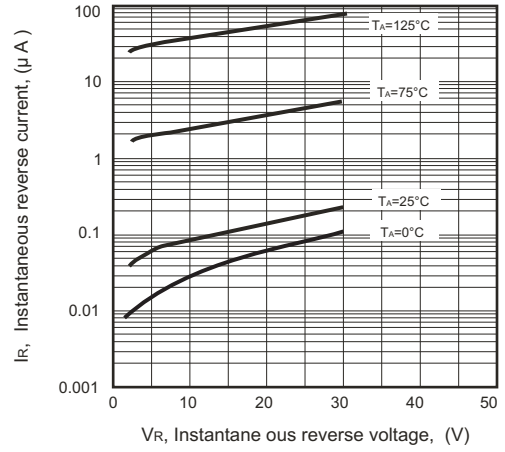


Fig.3 - Typical Capacitance vs Reverse Voltage

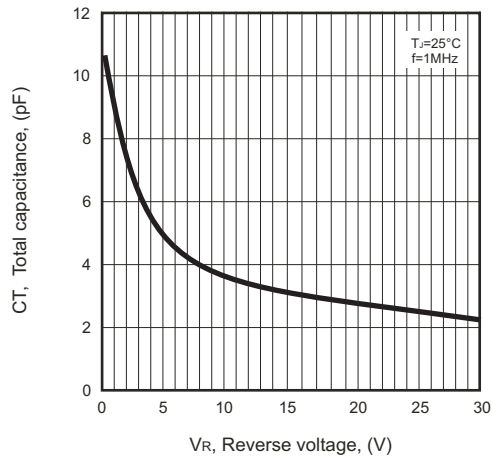
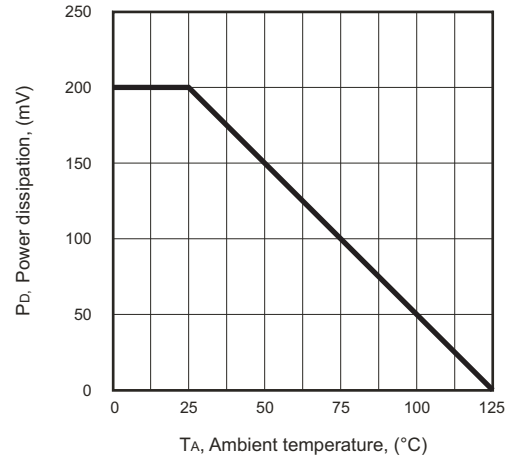
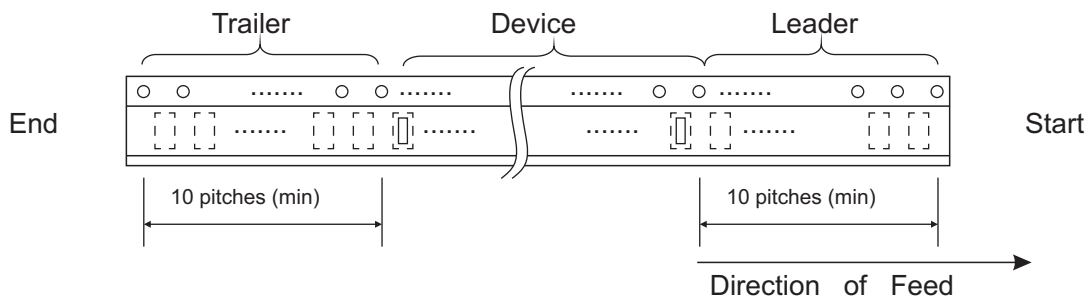
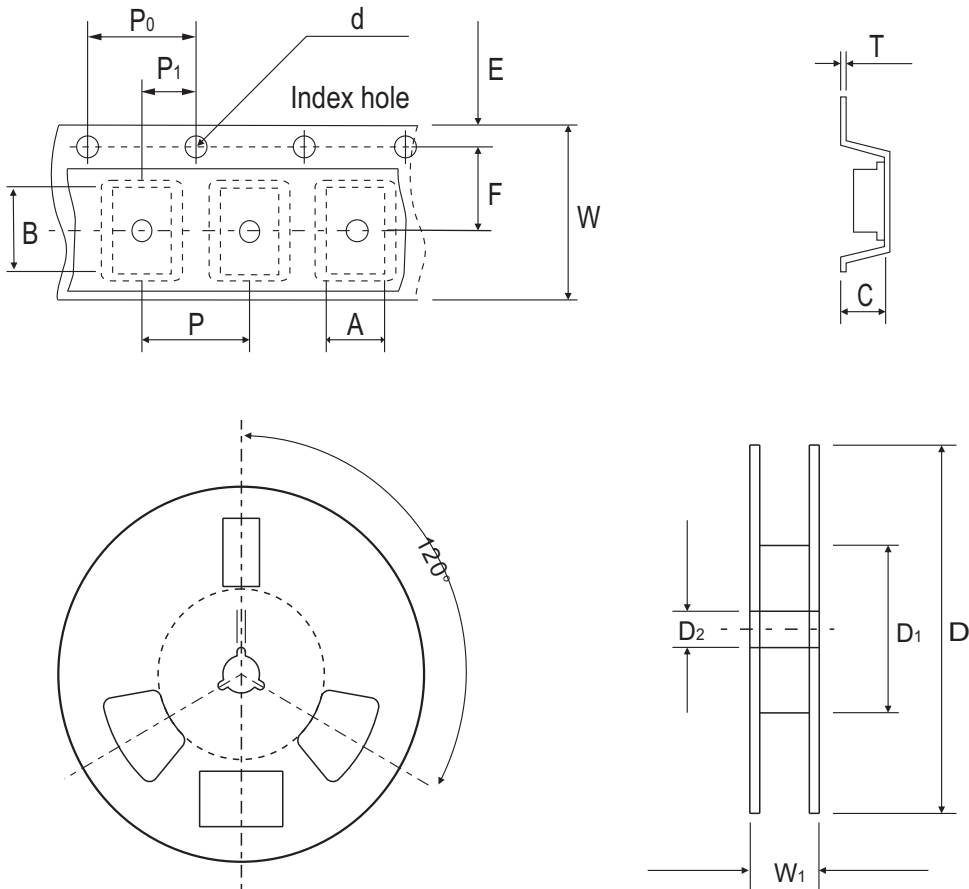


Fig.4 - Power Derating Curve



## Reel Taping Specification

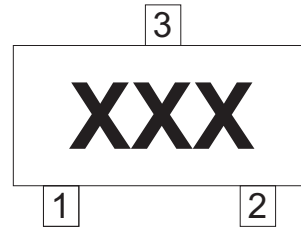


SOT-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.25 ± 0.10	2.55 ± 0.10	1.19 ± 0.10	1.55 ± 0.10	178 ± 1.00	54.40 ± 0.40	13.0 ± 0.20
	(inch)	0.089 ± 0.004	0.100 ± 0.004	0.047 ± 0.004	0.061 ± 0.004	7.008 ± 0.039	2.142 ± 0.016	0.512 ± 0.008

SOT-323	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 ± 0.30 / - 0.10	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 ± 0.012 / - 0.004	0.374 ± 0.039

## Marking Code

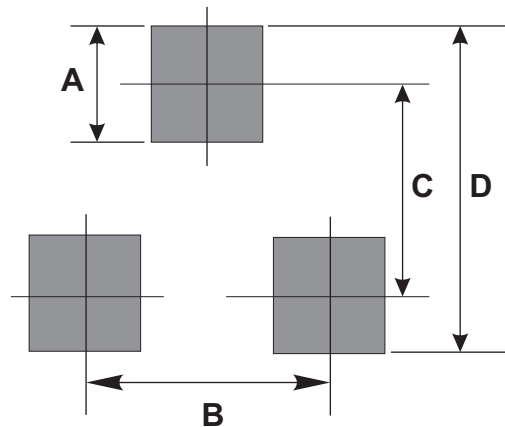
Part Number	Marking Code
CDBV3-54-G	KL5
CDBV3-54S-G	KL8
CDBV3-54C-G	KL7
CDBV3-54A-G	KL6



xxx = Product type marking code

## Suggested PAD Layout

SIZE	SOT-323	
	(mm)	(inch)
A	0.80	0.031
B	1.30	0.051
C	1.94	0.076
D	2.74	0.108



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
SOT-323	3,000	7