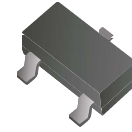


## CDBH3-00340-G

**Reverse Voltage: 40Volts**  
**Forward Current: 30mA**  
**RoHS Device**



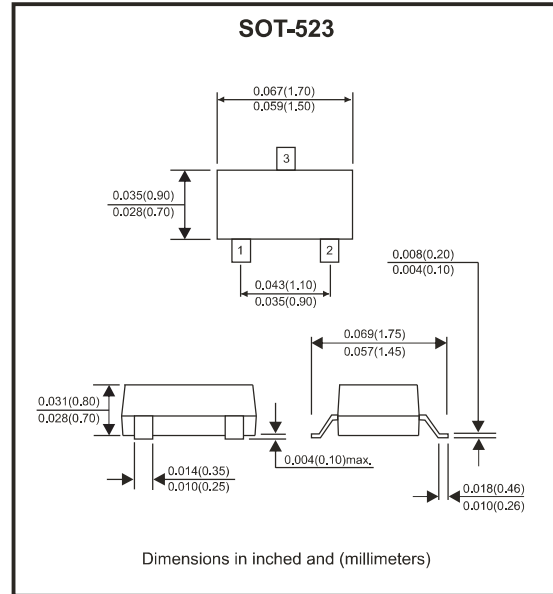
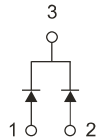
### Features

- Designed for mounting on small surface.
- High speed switching application, circuit protection.

### Mechanical data

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

### Equivalent circuit:



### Maximum Ratings (at Ta=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Repetitive peak reverse voltage		$V_{RRM}$			40	V
Reverse voltage		$V_R$			40	V
Average forward current		$I_o$			30	mA
Non-repetitive peak forward surge current	8,3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$		200		mA
Power dissipation		$P_D$			150	mW
Thermal resistance	Junction to Ambient	$R_{\theta JA}$			667	°C/W
Junction temperature		$T_J$			+125	°C
Storage temperature range		$T_{STG}$	-55		+150	°C

### Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Forward voltage	$I_F = 1\text{mA}$	$V_F$			0,37	V
Reverse current	$V_R = 10\text{V}$	$I_R$			1	$\mu\text{A}$
Capacitance between terminals	$V_R = 1\text{V}, f = 1\text{MHz}$	$C_J$		2		pF

## RATING AND TYPICAL CHARACTERISTIC CURVES (CDBH3-00340-G)

Fig.1 - Forward Characteristics

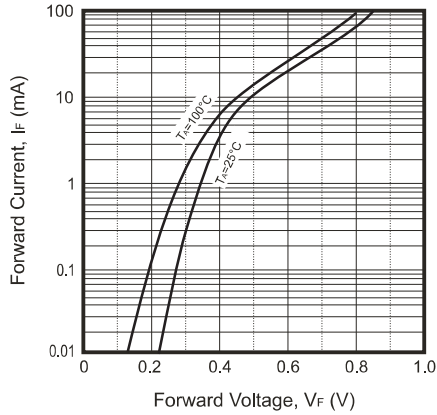


Fig.2 - Reverse Characteristics

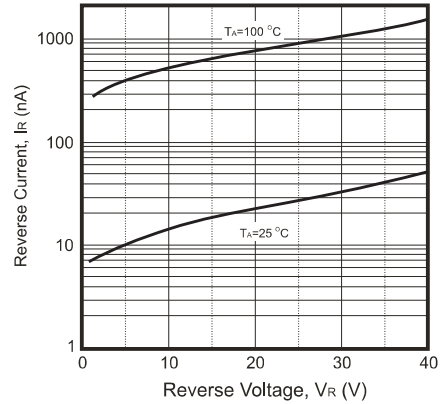


Fig.3 - Capacitance Characteristics

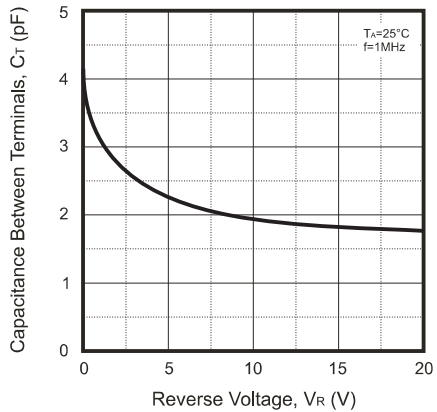
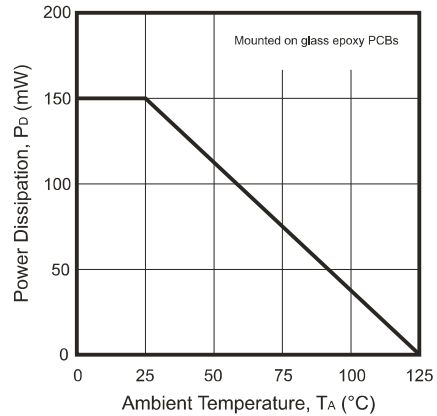
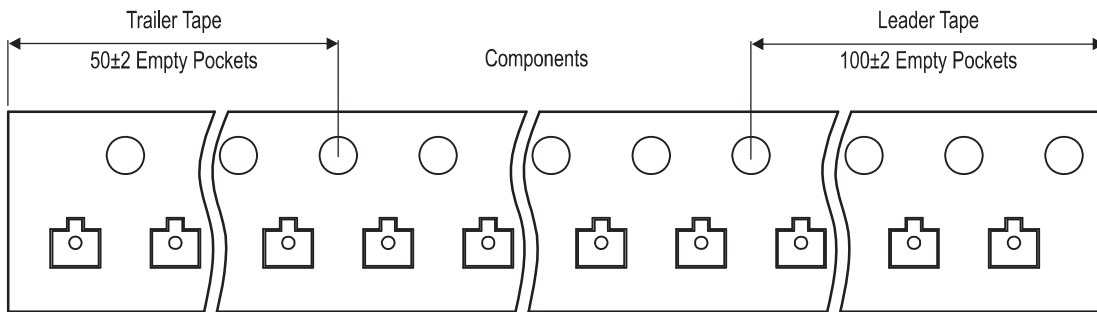
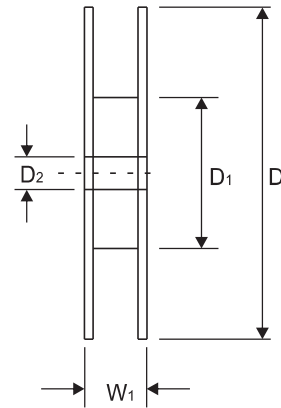
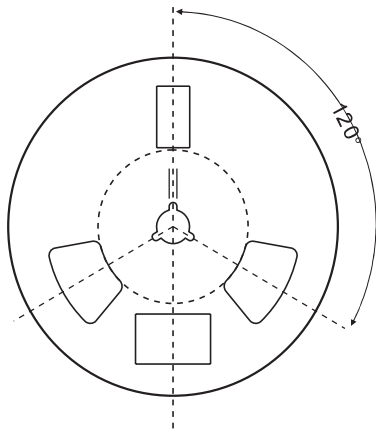
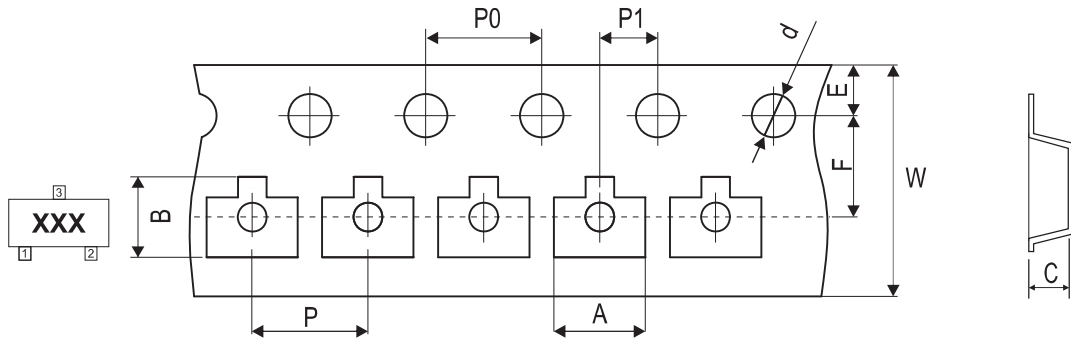


Fig.4 - Power Derating Curve



## Reel Taping Specification

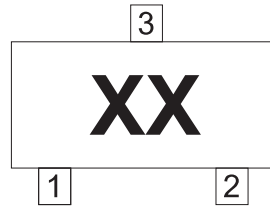


SOT-523	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	1.85 ± 0.05	1.85 ± 0.05	0.875 ± 0.05	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.073 ± 0.002	0.073 ± 0.002	0.034 ± 0.002	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOT-523	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	W	W <sub>1</sub>
	(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

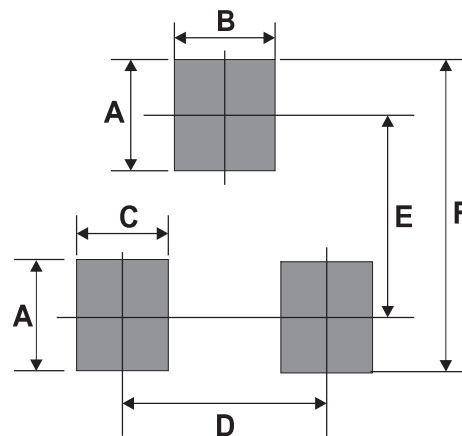
Part Number	Marking Code
CDBH3-00340-G	3D



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