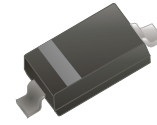


## CDBV340-HF

**Forward current: 3A**  
**Reverse voltage: 40V**  
**RoHS Device**  
**Halogen Free**



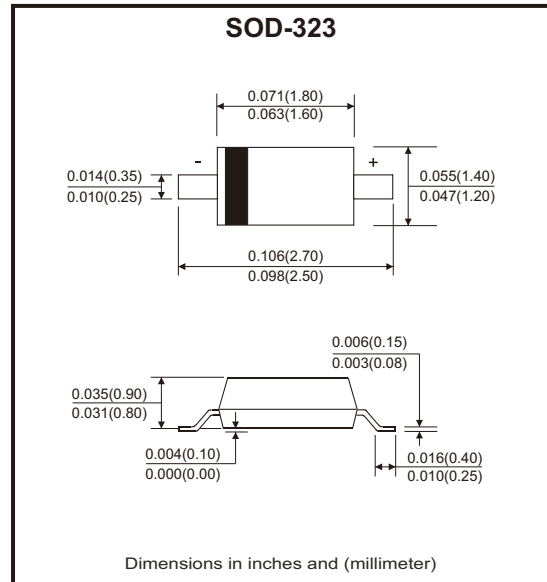
### Features

- Low forward voltage drop.
- For power supply.

### Mechanical data

- Case: SOD-323, molded plastic.
- Polarity: Color band denotes cathode end.
- Mounting position: Any.

### Circuit Diagram



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

Parameter	Symbol	Value	Unit	
Peak repetitive reverse voltage	$V_{RRM}$	40	V	
Working peak reverse voltage	$V_{RWM}$			
RMS reverse voltage	$V_{RMS}$	14	V	
Forward current (Note 3)	$I_F$	3	A	
Peak forward surge current 8.3ms single half sine-wave	$I_{FSM}$	9	A	
Typical Thermal resistance	$R_{\theta JA}$	(Note 1)	400	°C/W
		(Note 2)	208	
Power dissipation	$P_D$	(Note 1)	250	mW
		(Note 2)	480	
Operating junction temperature	$T_J$	125	°C	
Storage temperature range	$T_{STG}$	-55 to +150	°C	

Notes: 1. Device mounted on an FR4 PCB, single-sided copper, tin-plated and standard footprint.  
 2. Device mounted on an FR4 PCB with copper pad 10 x 10 mm.  
 3. Pulse test:  $t_p \leq 300 \mu s$ ;  $\delta \leq 0.02$ .

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

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Forward voltage	$I_F = 1A$	$V_F$			0.45	V
	$I_F = 2A$				0.55	
	$I_F = 3A$				0.65	
Reverse breakdown voltage	$I_R = 1mA$	$V_{(BR)}$	40			V
Maximum reverse current @ $T_J = 25^\circ C$	$V_R = 20V$	$I_R$			50	$\mu A$
	$V_R = 40V$				100	
Total capacitance	$V_R = 5V, f = 1MHz$	$C_{tot}$			120	pF

Notes: 1. Pulse test:  $t_p \leq 300 \mu s$ ;  $\delta \leq 0.02$ .

## Typical Rating and Characteristic Curves (CDBV340-HF)

Fig.1 - Power Derating Curve

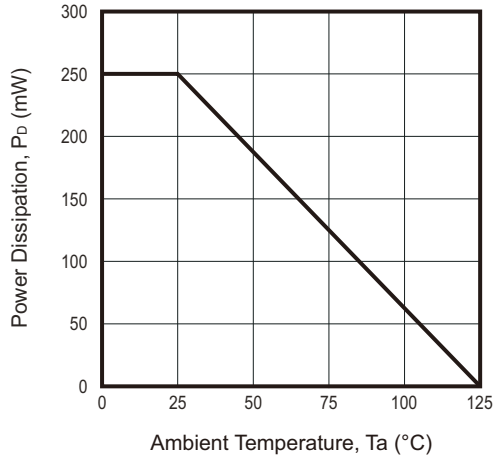


Fig.2 - Capacitance Characteristics

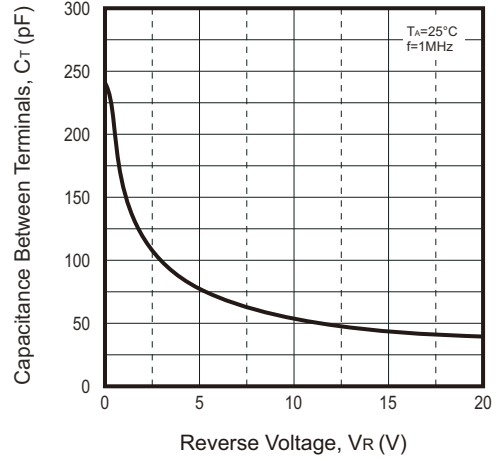


Fig.3 - Forward Characteristics

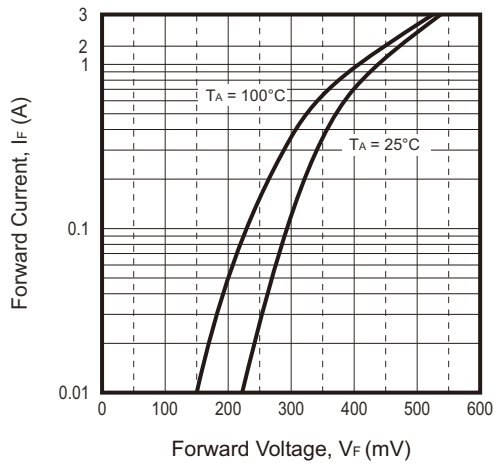
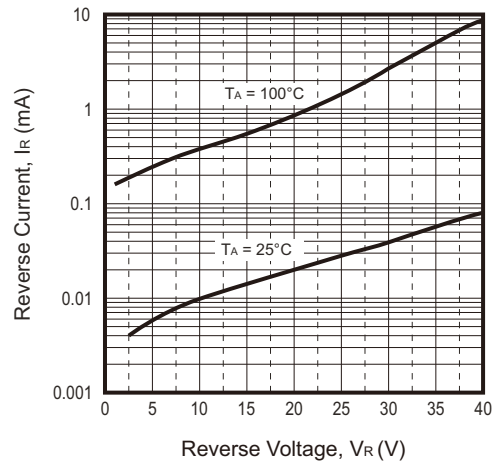
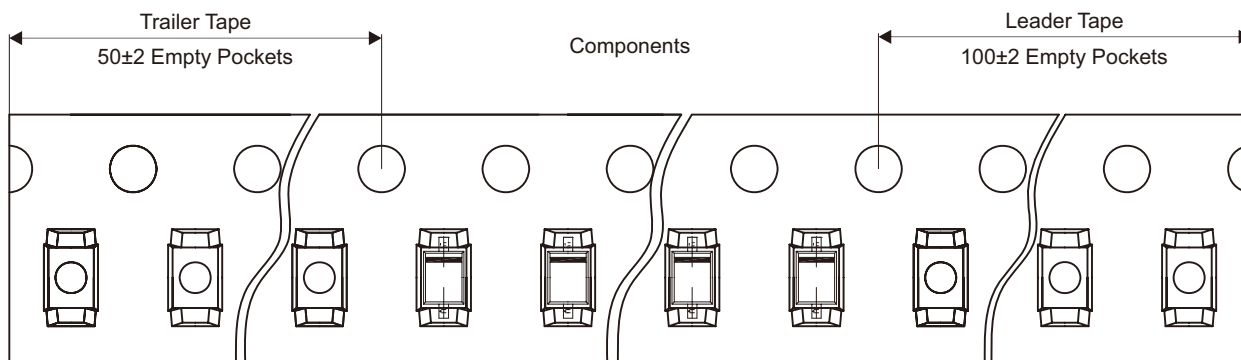
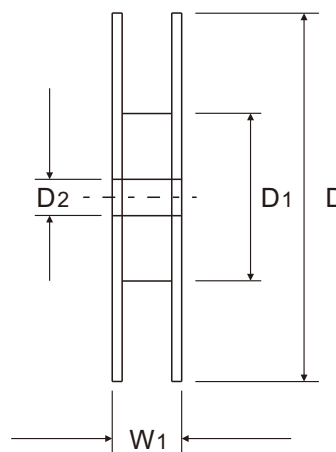
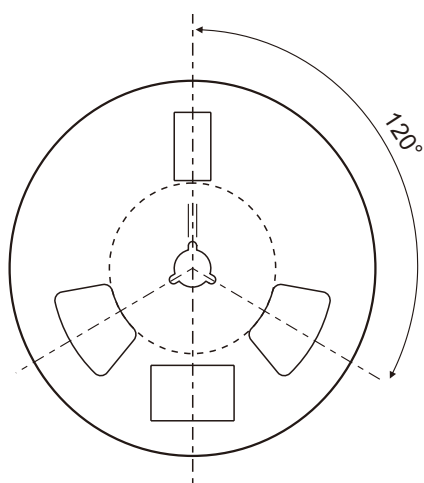
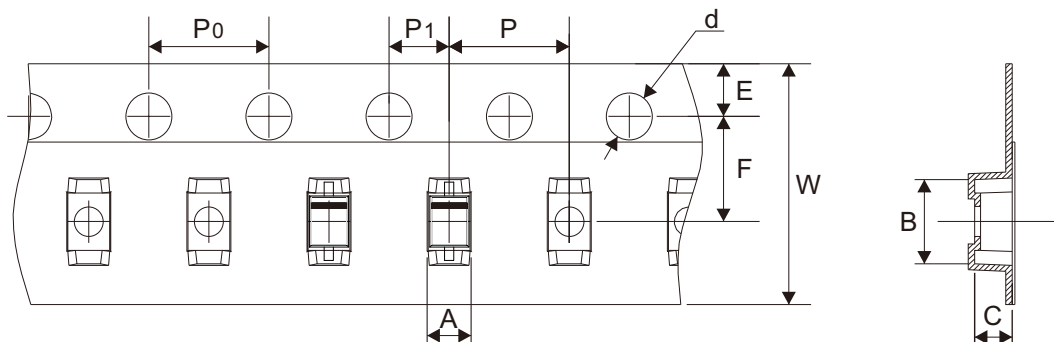


Fig.4 - Reverse Characteristics



## Reel Taping Specification




SOD-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.46 ± 0.05	2.90 ± 0.05	1.25 ± 0.05	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.057 ± 0.002	0.114 ± 0.002	0.049 ± 0.002	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOD-323	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

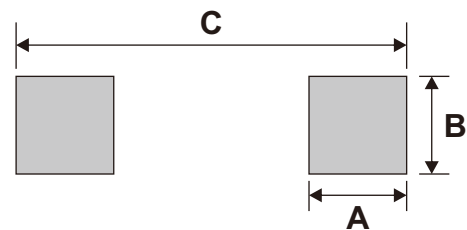
Part Number	Marking Code
CDBV340-HF	SH



 = Cathode band  
 Solid dot = Halogen Free

## Suggested P.C.B. PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	0.80	0.031
B	0.80	0.031
C	3.00	0.118



## Standard Packaging

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