



**THE DATASHEET OF  
CDBV1100-HF**



## CDBV1100-HF

Forward current: 1A

Reverse voltage: 100V

RoHS Device  
Halogen Free

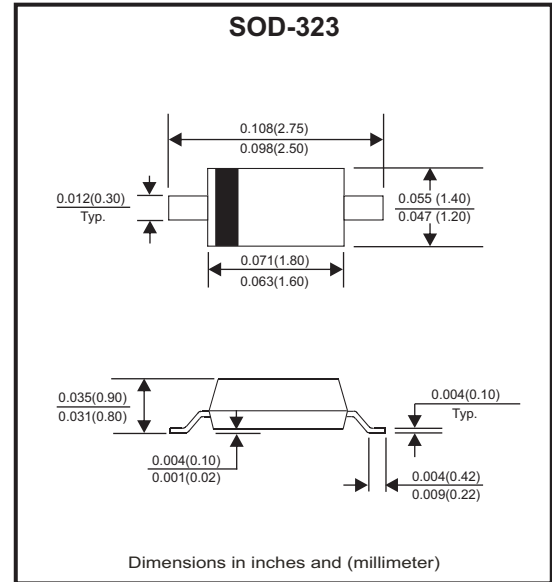


### Features

- Low leakage current.
- Easy pick and place.
- Plastic package has Underwriters Lab. Flammability Classification 94V-0
- Exceeds environmental standard MIL-S-19500/228.

### Mechanical Data

- Case: SOD-323, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode end.



### Circuit Diagram



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

Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	$V_{RRM}$	100	V
Working peak reverse voltage	$V_{RWM}$		V
RMS reverse voltage	$V_{R(RMS)}$	70	V
Average rectified output current	$I_o$	1	A
Non-repetitive peak forward surge current @ t=8.3ms	$I_{FSM}$	9	A
Power dissipation	$P_D$	250	mW
Thermal resistance from junction to ambient	$R_{\theta JA}$	400	°C/W
Junction temperature range	$T_J$	-55 ~ +150	°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
Reverse current $T_J=25^\circ C$	$V_R = 100V$	$I_R$		0.2	50	uA
Forward voltage (Note 1)	$I_F = 0.1A$	$V_F$		0.52		V
	$I_F = 1A$				0.82	
Total capacitance	$f = 1MHz, V_R = 4V$	$C_{tot}$		25		pF

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

Company reserves the right to improve product design , functions and reliability without notice.

REV: A

## RATING AND CHARACTERISTIC CURVES (CDBV1100-HF)

Fig.1 - Power Derating Curve

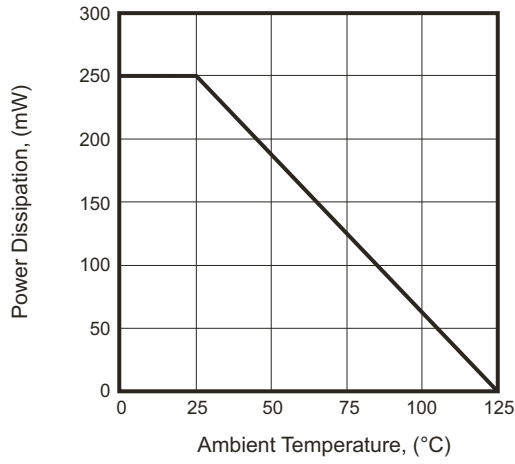


Fig.2 - Typical Forward Characteristics

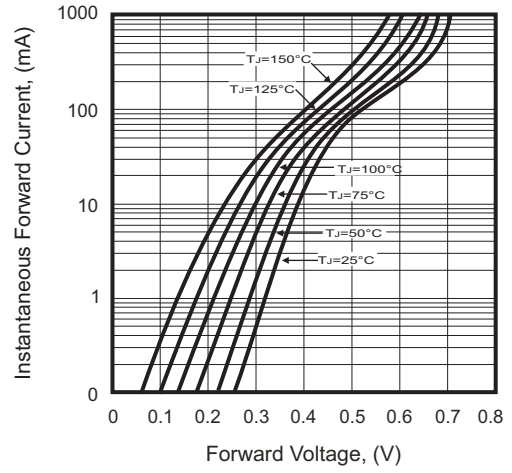


Fig.3 - Typical Reverse Characteristics

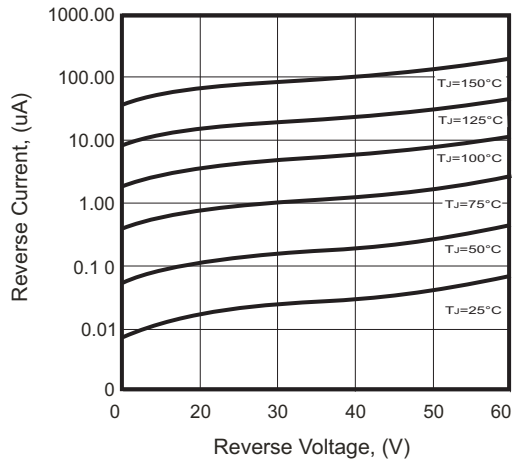
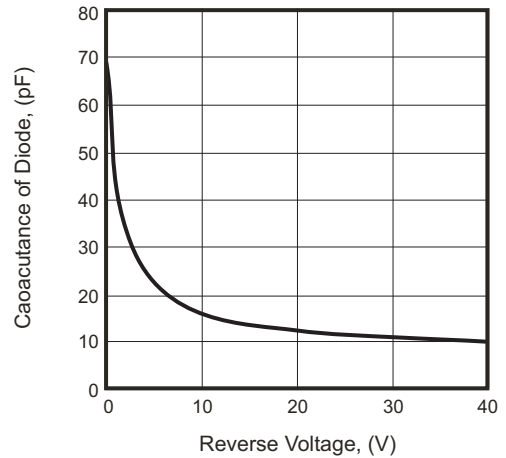
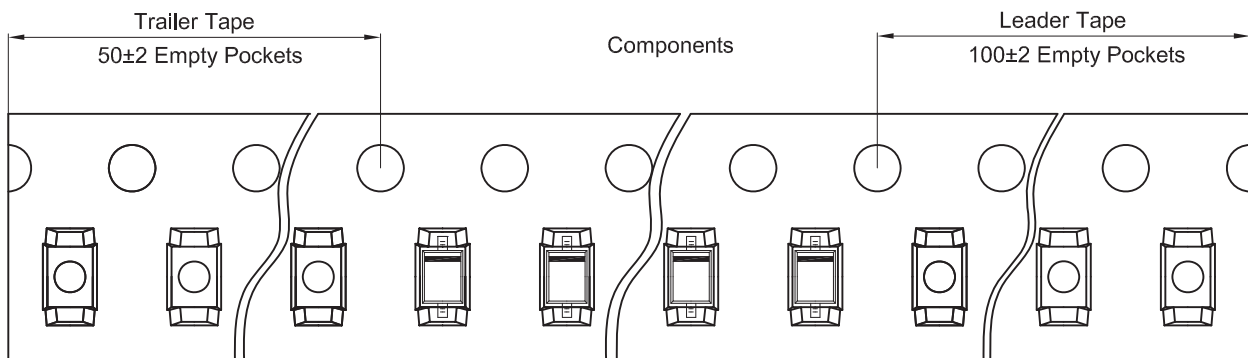
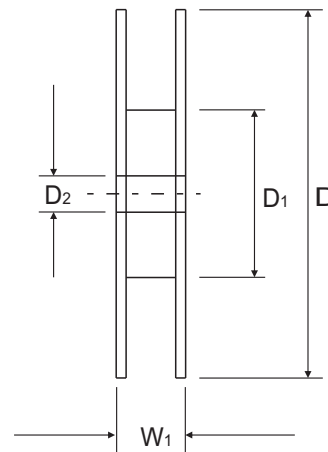
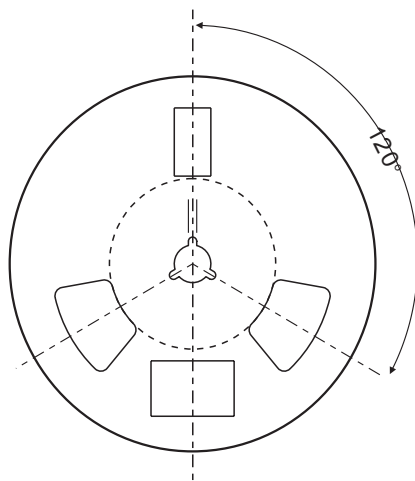
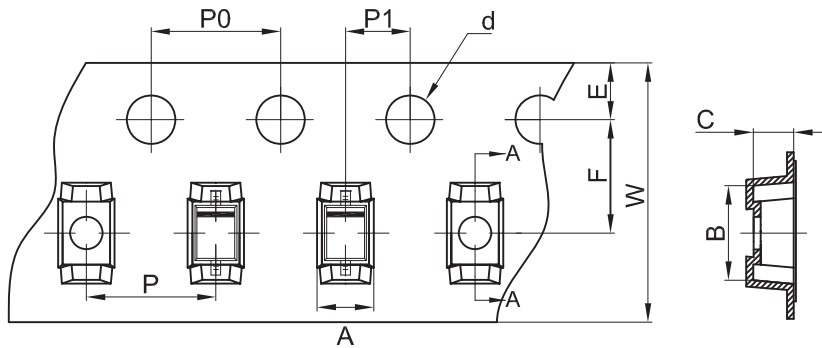


Fig.4 - Typical Capacitance of Diodes



## Reel Taping Specification



SOD-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.46 ± 0.05	3.30 ± 0.05	1.25 ± 0.05	1.50 + 0.10	178.00 ± 1.00	54.40 ± 1.00	13.00 ± 0.50
	(inch)	0.057 ± 0.002	0.130 ± 0.002	0.049 ± 0.002	0.059 + 0.004	7.008 ± 0.039	2.142 ± 0.039	0.512 ± 0.020

SOD-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 ± 0.05	8.00 + 0.30 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.158 ± 0.004	0.158 ± 0.004	0.079 ± 0.002	0.315 + 0.012 - 0.004	0.484 ± 0.039

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REV: A

## Marking Code

Part Number	Marking Code
CDBV1100-HF	10

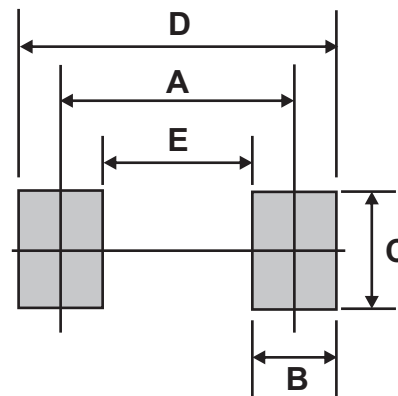


**XX** = Product type marking code

**|** = The marking bar indicates the cathode.

## Suggested PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	2.22	0.087
B	0.63	0.025
C	0.83	0.033
D	2.85	0.113
E	1.60	0.063



## Standard Packaging

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

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