



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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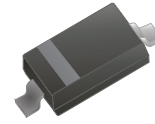


CDBV1100-HF

Forward current: 1.0 A

Reverse voltage: 100V

RoHS Device
Halogen Free

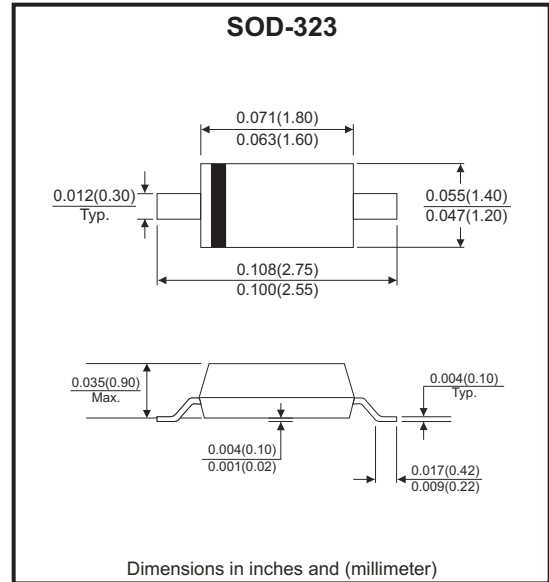


Features

- 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 $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	V_{RRM}	100	V
Working peak reverse voltage	V_{RWM}		
RMS reverse voltage	$V_{R(RMS)}$	70	V
Average rectified output current	I_O	1	A
Non-repetitive peak forward surge current @ $t=8.3\text{ms}$	I_{FSM}	9	A
Power dissipation	P_D	250	mW
Thermal resistance from junction to ambient	$R_{\theta JA}$	400	$^\circ\text{C/W}$
Junction temperature range	T_J	-55 ~ +150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 ~ +150	$^\circ\text{C}$

Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Reverse current	$V_R = 100\text{V}$, $T_J = 25^\circ\text{C}$	I_R		0.2	50	μA
Forward voltage (Note 1)	$I_F = 0.1\text{A}$	V_F		0.52		V
	$I_F = 1\text{A}$				0.82	
Total capacitance	$f = 1\text{MHz}$, $V_R = 4\text{V}$	C_{tot}		25		pF

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

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

RATING AND CHARACTERISTIC CURVES (CDBV1100-HF)

Fig.1 - Power Derating Curve

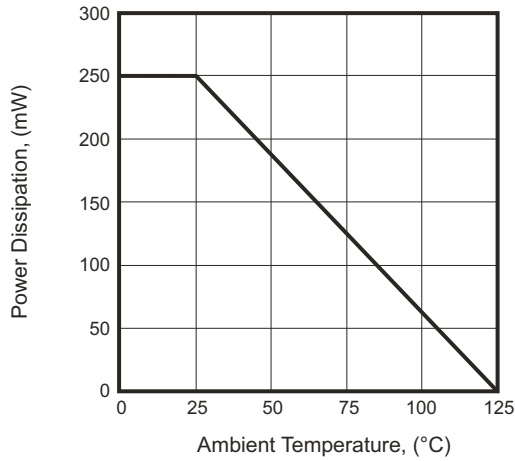


Fig.2 - Typical Forward Characteristics

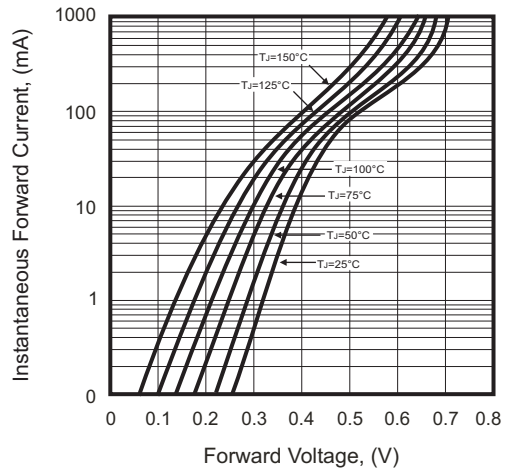


Fig.3 - Typical Reverse Characteristics

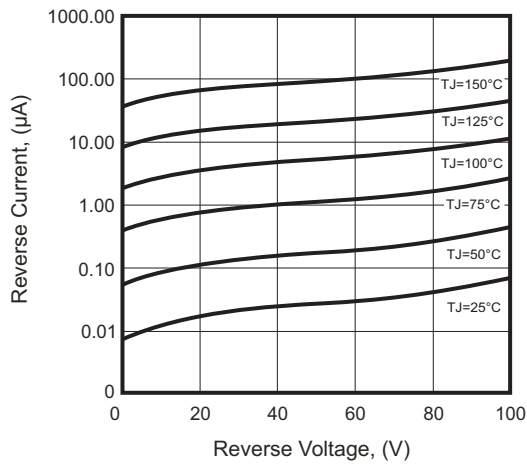
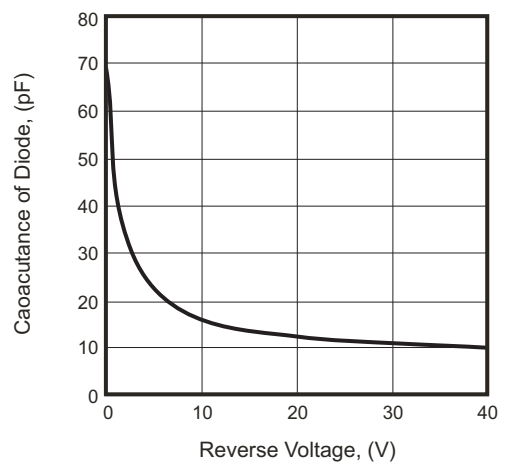
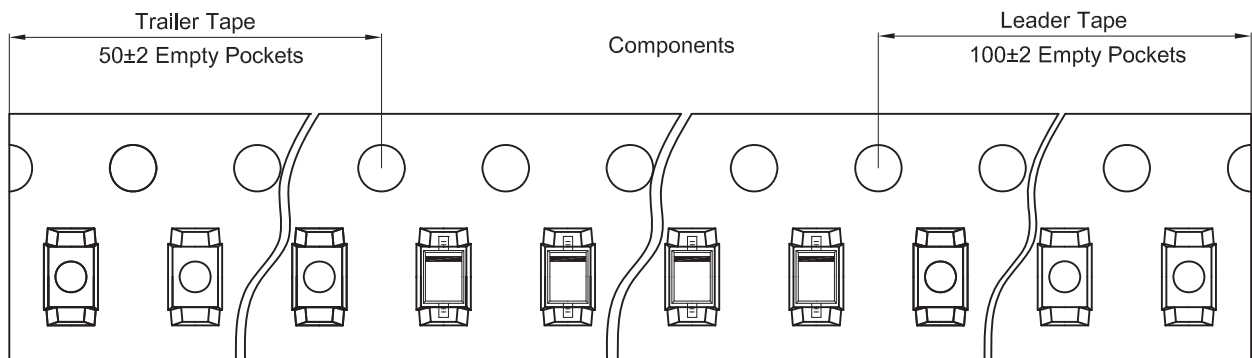
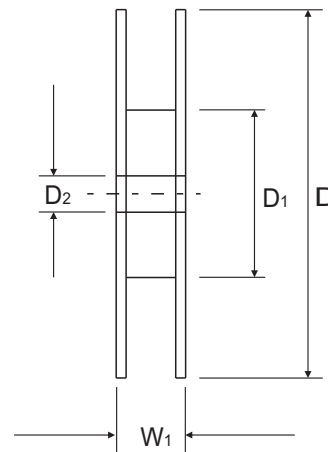
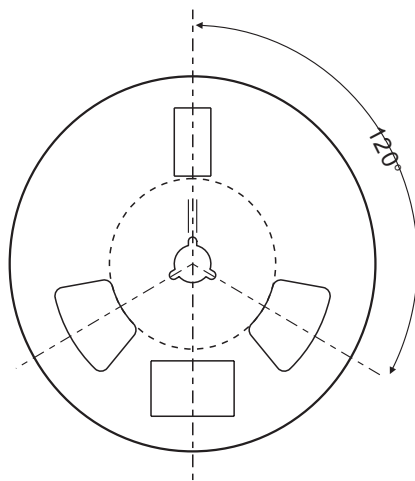
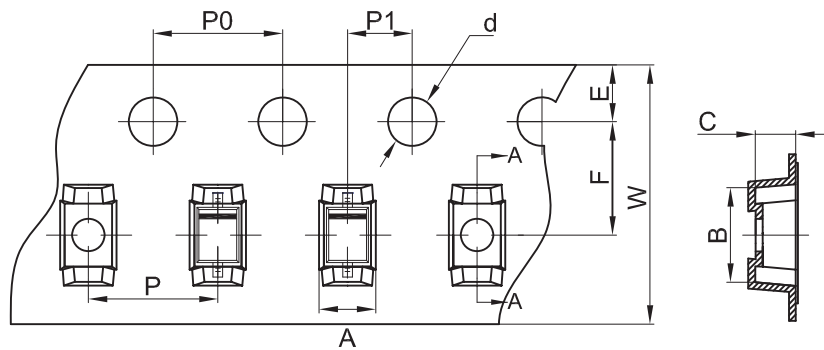


Fig.4 - Typical Capacitance of Diodes



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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Marking Code

Part Number	Marking Code
CDBV1100-HF	10

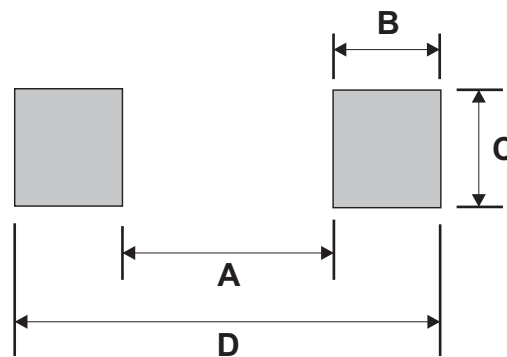


XX = Product type marking code

| = The marking bar indicates the cathode.

Suggested PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	1.60	0.063
B	0.63	0.024
C	0.83	0.033
D	2.86	0.112



Note:

1. The pad layout is for reference purposes only.

Standard Packaging

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