

CDBV1100-HF

Forward current: 1A

Reverse voltage: 100V

RoHS Device

Halogen Free

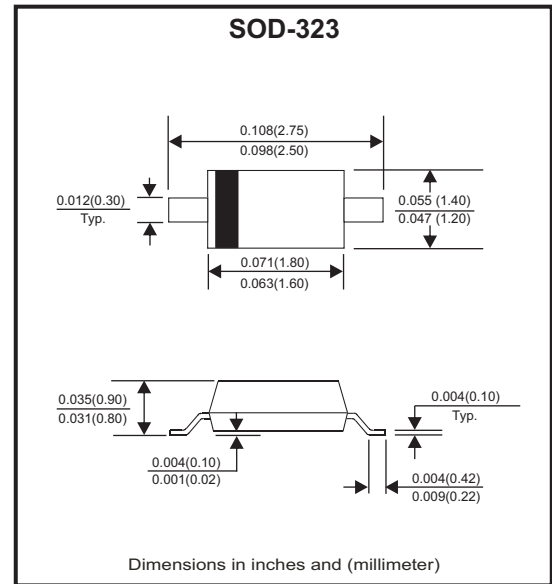


Features

- 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 $T_a=25^\circ\text{C}$, 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 $T_J=25^\circ\text{C}$	$V_R = 100\text{V}$	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: A

RATING AND CHARACTERISTIC CURVES (CDBV1100-HF)

Fig.1 - Power Derating Curve

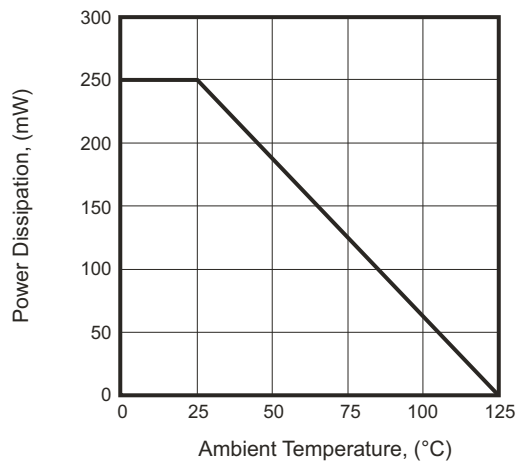


Fig.2 - Typical Forward Characteristics

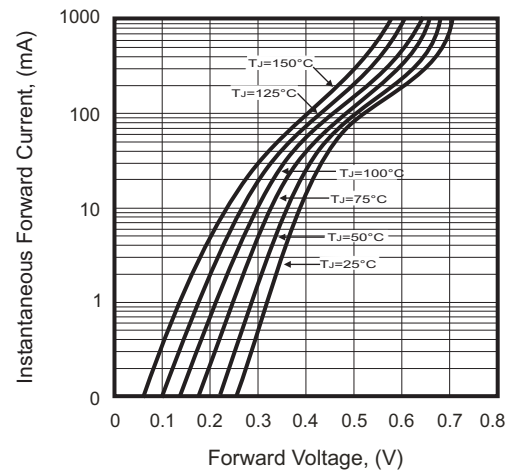


Fig.3 - Typical Reverse Characteristics

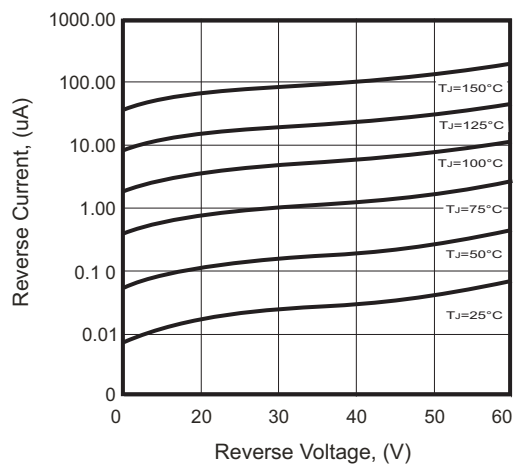
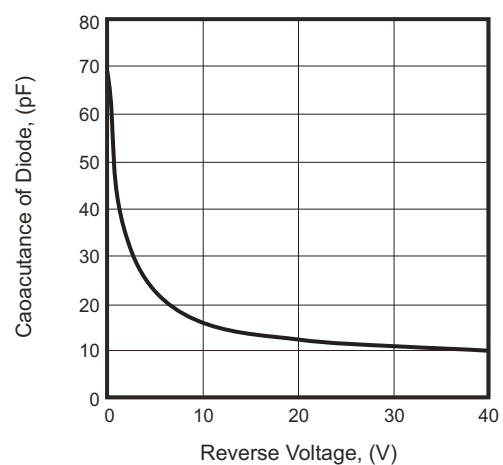
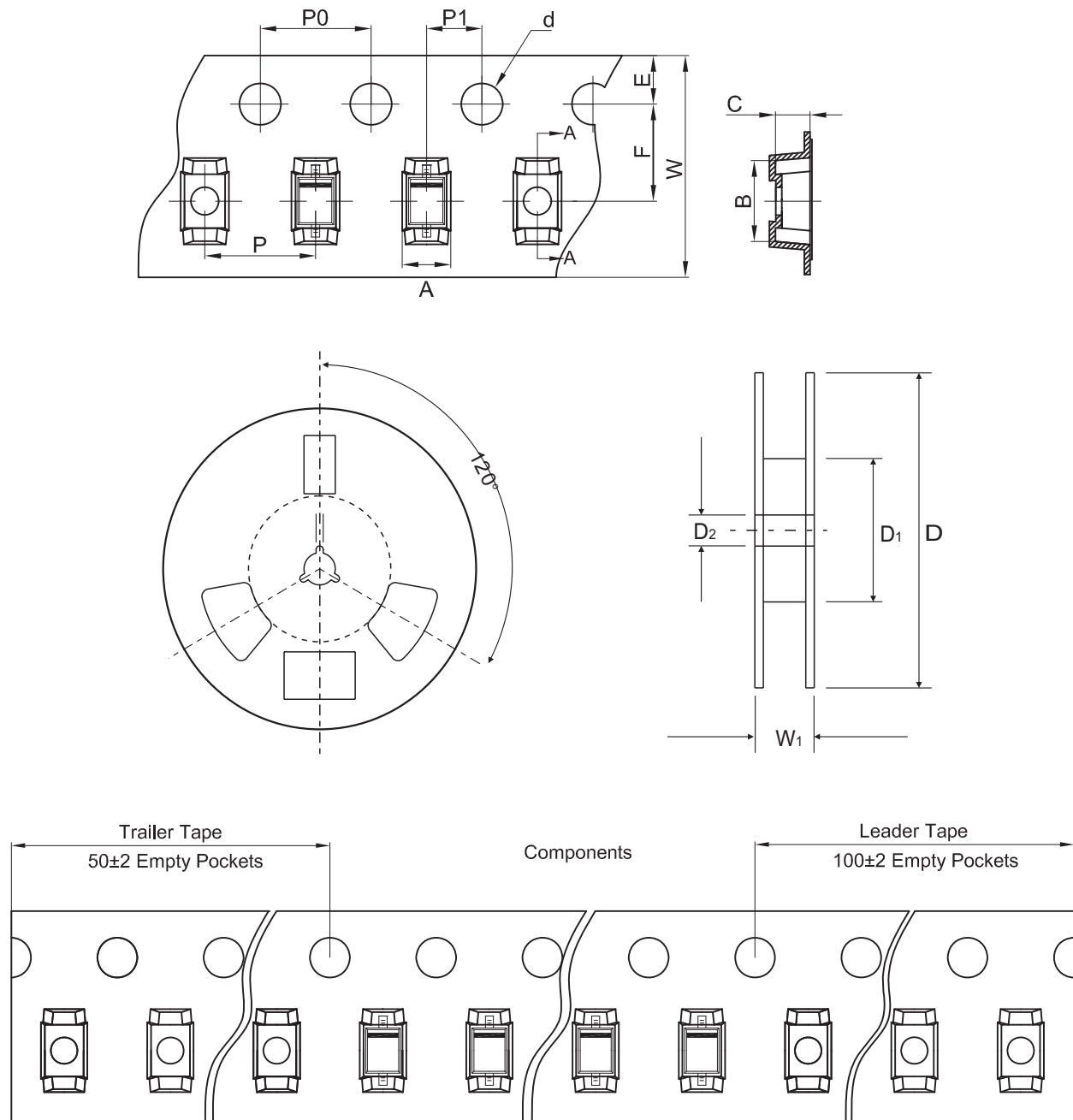


Fig.4 - Typical Capacitance of Diodes



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

Marking Code

Part Number	Marking Code
CDBV1100-HF	10

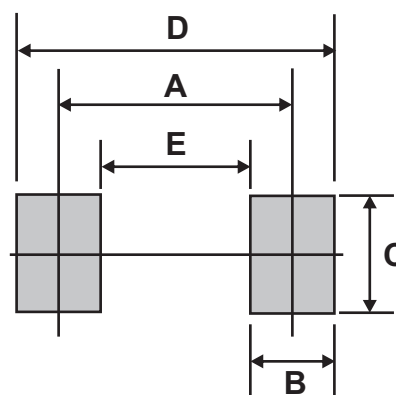


XX = Product type marking code

| = 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