

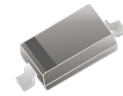
CDBV0140-HF

$I_o=0.1A$

$V_R=40V$

RoHS Device

Halogen Free



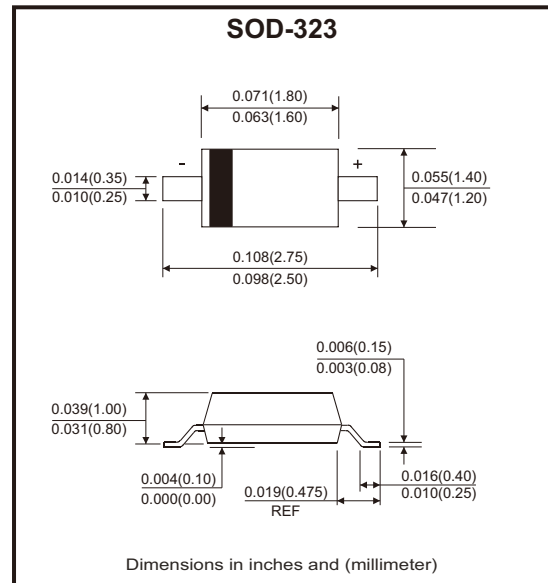
Features

- Low current rectifier schottky diode.
- Low voltage, low inductance.
- For power supply.

Mechanical Data

- Case: SOD-323, molded plastic.
- Polarity: Indicated by cathode end.
- Mounting position: Any.

Circuit Diagram



Maximum Ratings (single diode at $T_a=25^\circ C$ unless otherwise noted)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	45	V
DC reverse voltage	V_R	40	V
Mean rectifying current	I_o	0.1	A
Non-repetitive peak forward surge current @ $t=8.3ms$	I_{FSM}	1	A
Power dissipation	P_D	200	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	500	$^\circ C/W$
Operating junction temperature range	T_J	-40 to +125	$^\circ C$
Storage temperature range	T_{STG}	-55 to +150	$^\circ C$

Electrical Characteristics (at $T_a=25^\circ C$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 100mA$ $I_F = 10mA$	V_F			0.55 0.34	V
Reverse current	$V_R = 10V$	I_R			30	μA
Capacitance between terminals	$V_R = 10V, f = 1MHz$	C_T		6		pF

Rating and Characteristic Curves (CDBV0140-HF)

Fig.1 - Forward Characteristics

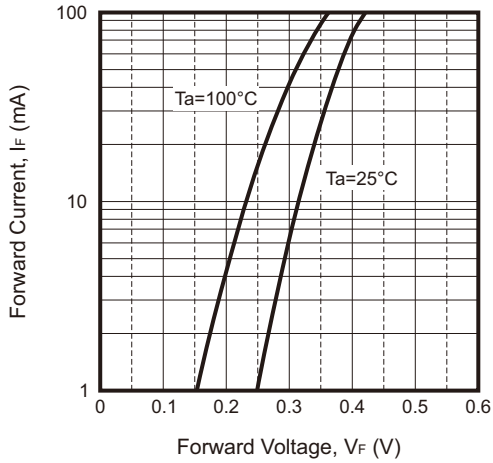


Fig.2 - Reverse Characteristics

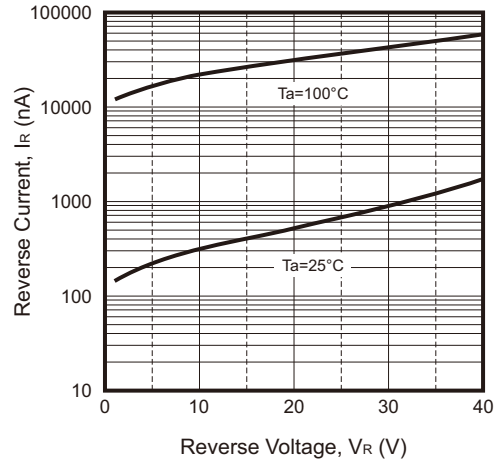


Fig.3 - Capacitance Characteristics

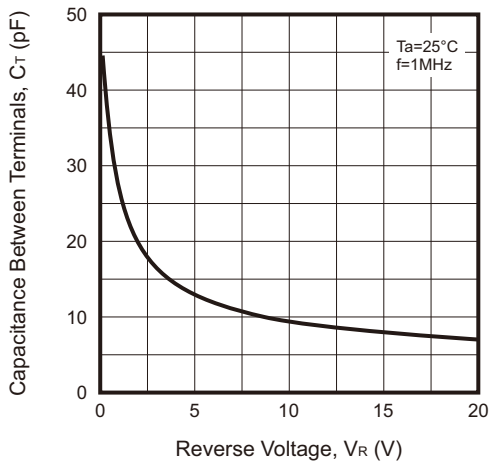
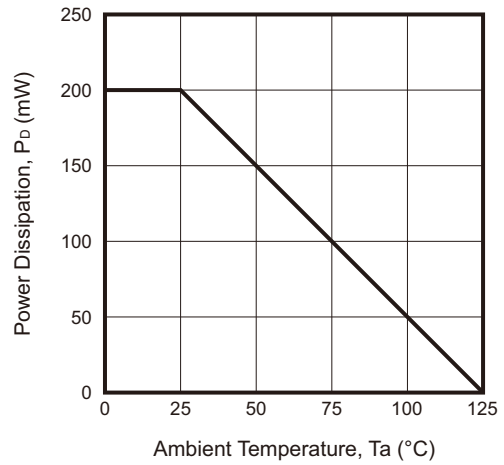
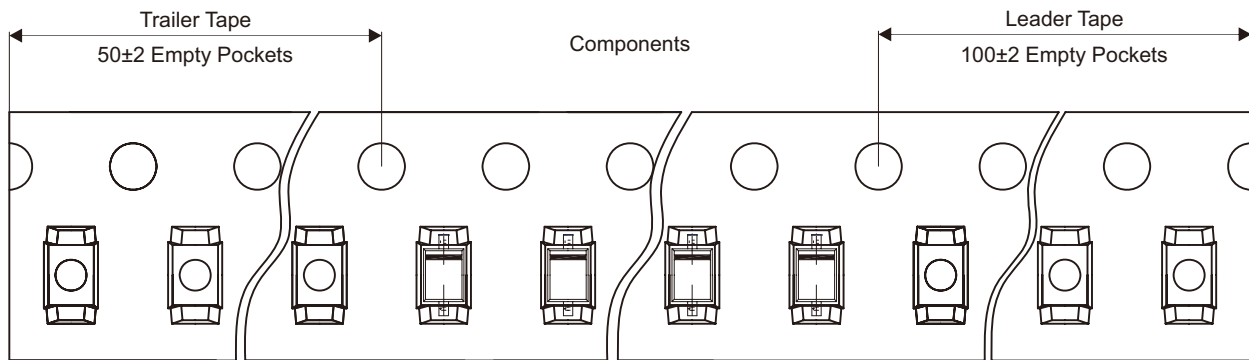
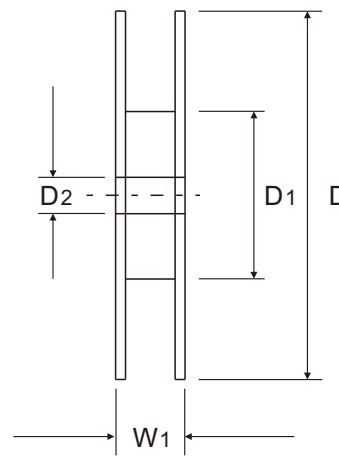
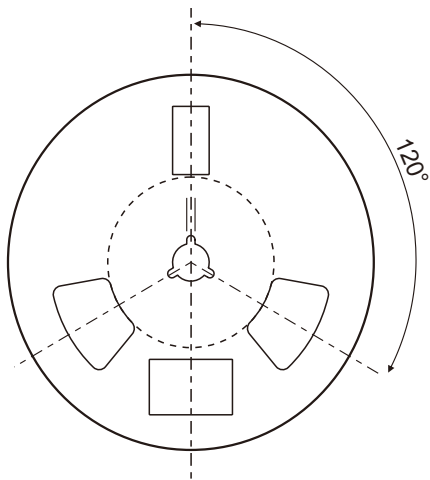
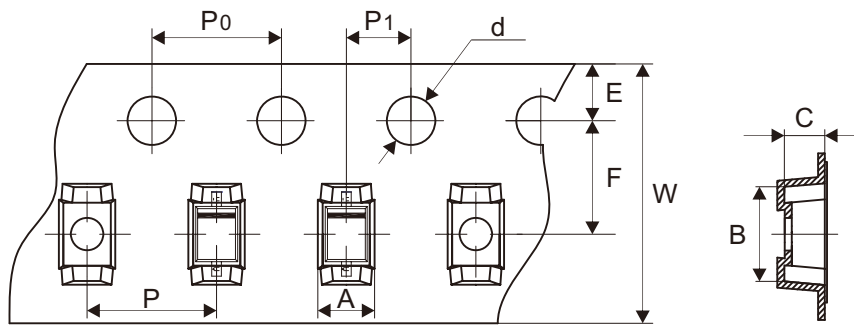


Fig.4 - Power Derating Curve



Reel Taping Specification



SOD-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.48 ± 0.05	3.30 ± 0.05	1.25 ± 0.05	1.50 + 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.058 ± 0.002	0.130 ± 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
CDBV0140-HF	4

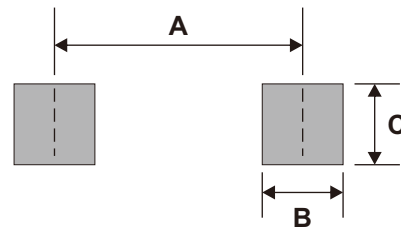


■ = Cathode band

Solid dot = Control code

Suggested P.C.B. PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	2.15	0.085
B	0.70	0.028
C	0.70	0.028



Standard Packaging

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