

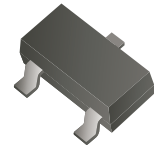
CDBV3-00340S/C/A-HF

Reverse Voltage: 40 V

Forward Current: 30 mA

RoHS Device

Halogen Free



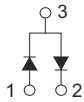
Features

- Design for mounting on small surface.
- High speed switching application,circuit protection.
- Low turn-on voltage.

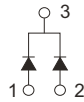
Mechanical data

- Case: SOT-323, molded plastic.
- Mounting position: Any.

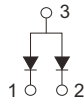
Circuit Diagram



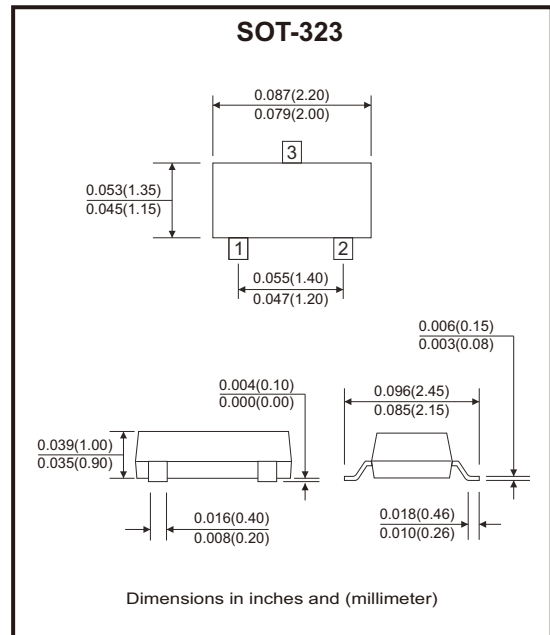
CDBV3-00340S-HF



CDBV3-00340C-HF



CDBV3-00340A-HF



Maximum Ratings (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak reverse voltage	V_{RRM}				40	V
DC reverse voltage	V_R				40	V
Average forward current	I_O				30	mA
Non-repetitive peak forward surge current	I_{FSM}	@t=8.3ms half sine-wave superimposed on rate load (JEDEC method)			200	mA
Power dissipation	P_D				200	mW
Thermal resistance	$R_{\theta JA}$	Junction to ambient			500	°C/W
Junction temperature range	T_J		-40		+125	°C
Storage temperature range	T_{STG}		-55		+150	°C

Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F = 1\text{mA}$			0.37	V
Reverse current	I_R	$V_R = 10\text{V}$			1	μA
Capacitance between terminals	C_J	$V_R = 1\text{V}, f = 1\text{MHz}$		2		pF

Typical Rating and Characteristic Curves (CDBV3-00340S/C/A-HF)

Fig.1 - Forward Characteristics

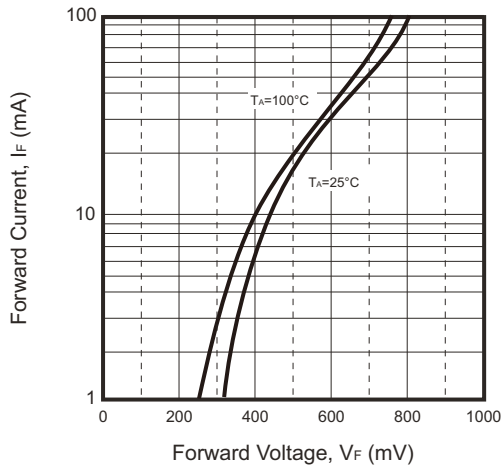


Fig.2 - Reverse Characteristics

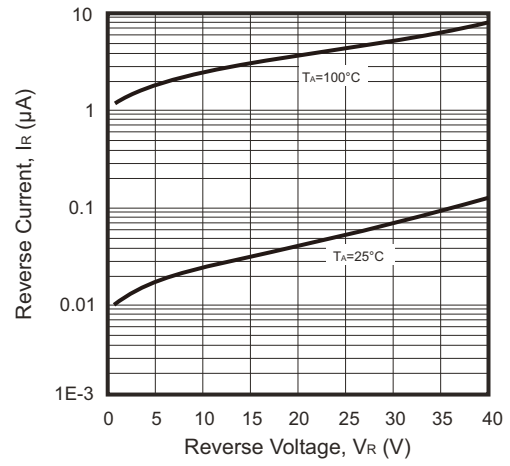


Fig.3 - Capacitance Characteristics

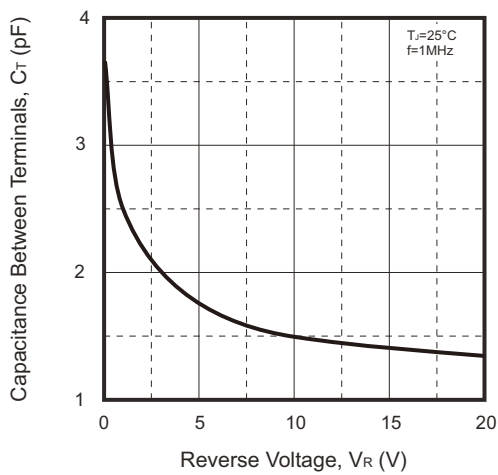
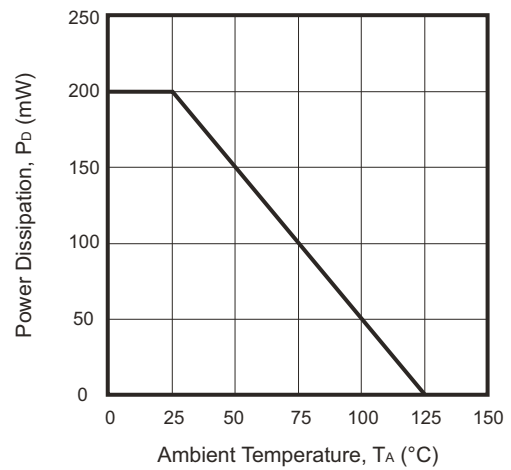
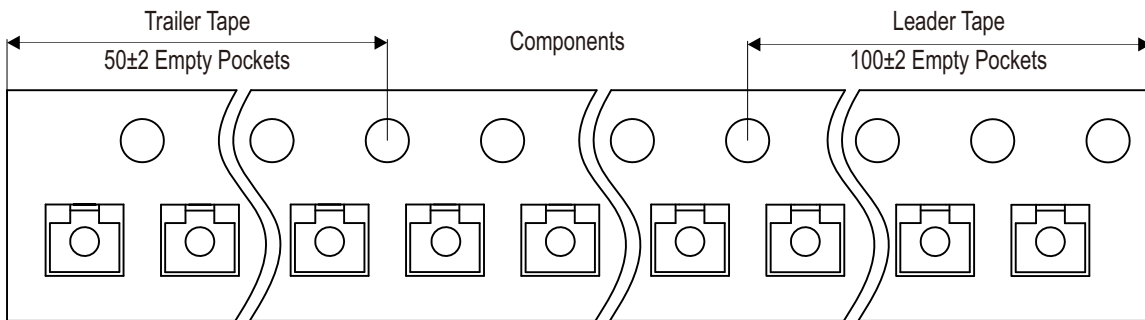
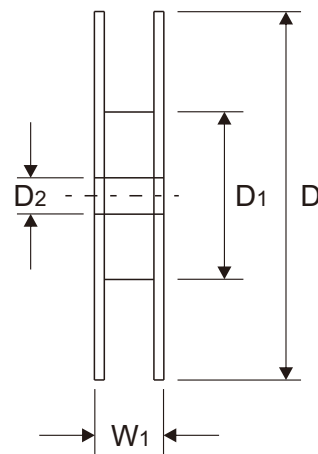
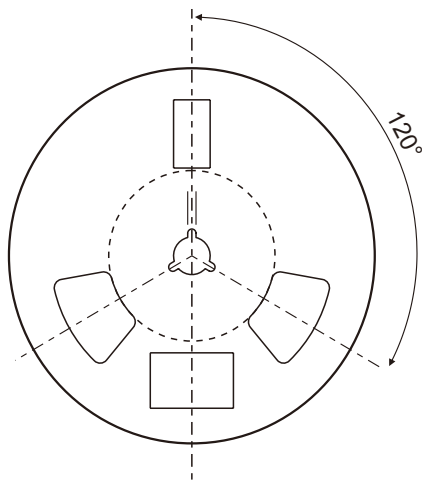
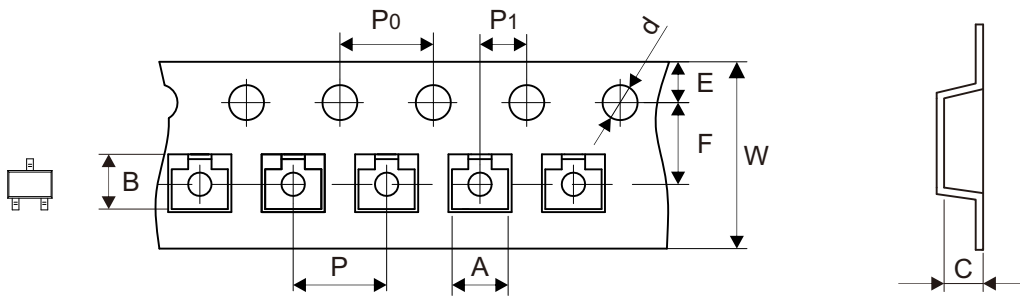


Fig.4 - Power Derating Curve



Reel Taping Specification

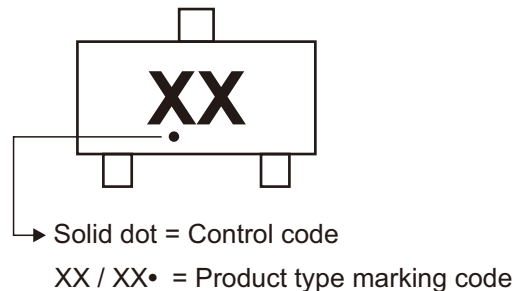


SOT-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.25 ± 0.05	2.55 ± 0.05	1.19 ± 0.05	1.55 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.089 ± 0.002	0.100 ± 0.002	0.047 ± 0.002	0.061 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOT-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

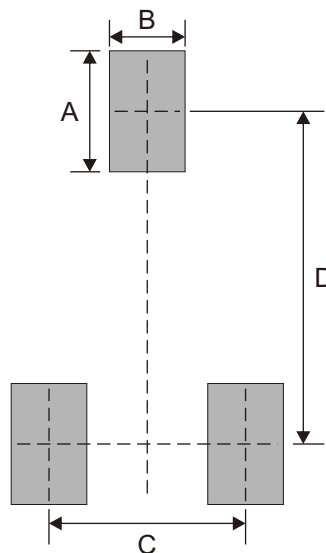
Marking Code

Part Number	Marking Code
CDBV3-00340A-HF	3E•
CDBV3-00340C-HF	3D
CDBV3-00340S-HF	3J•



Suggested P.C.B. PAD Layout

SIZE	SOT-323	
	(mm)	(inch)
A	0.80	0.031
B	0.50	0.020
C	1.30	0.051
D	2.20	0.087



Standard Packaging

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