

Small Signal Switching Diodes

Comchip
SMD Diode Specialist

CDSV3-217-HF

Reverse Voltage: 80 V

Forward Current: 300 mA

RoHS Device

Halogen Free



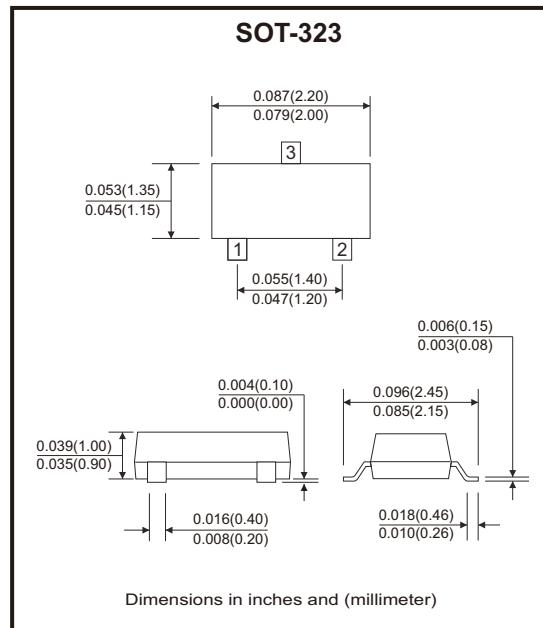
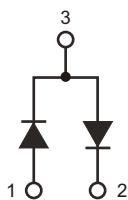
Features

- Small surface mounting type.
- Two diode elements are connected in series.

Mechanical Data

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

Circuit Diagram



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

Parameter	Symbol	Value	Unit
Non-repetitive peak reverse voltage	V _{RM}	80	V
DC blocking voltage	V _R	80	V
Forward continuous current	I _{FM}	300	mA
Non-repetitive peak forward surge current @ t = 8.3ms	I _{FSM}	2	A
Average rectified output current	I _O	100	mA
Power dissipation	P _D	200	mW
Thermal resistance, junction to ambient	R _{θJA}	625	°C/W
Operation junction and storage temperature range	T _J , T _{STG}	-55 to +150	°C

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	V _(BR)	I _R = 100µA	80			V
Reverse voltage leakage current	I _R	V _R = 70V			0.2	µA
Forward voltage	V _F	I _F = 100mA			1.2	V

REV:B

Typical Rating and Characteristic Curves (CDSV3-217-HF)

Fig.1 - Forward Characteristics

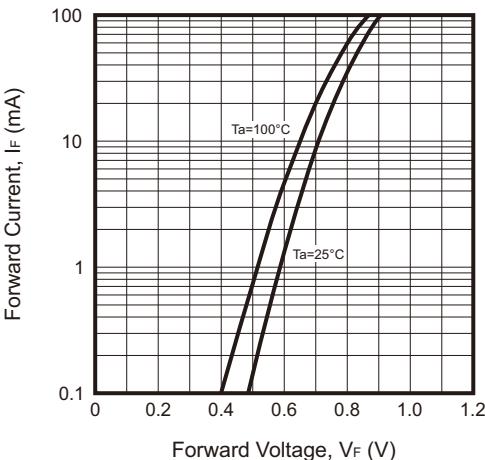


Fig.2 - Reverse Characteristics

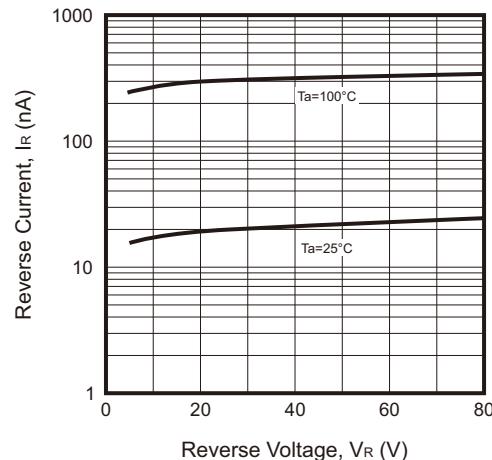


Fig.3 - Capacitance Characteristics

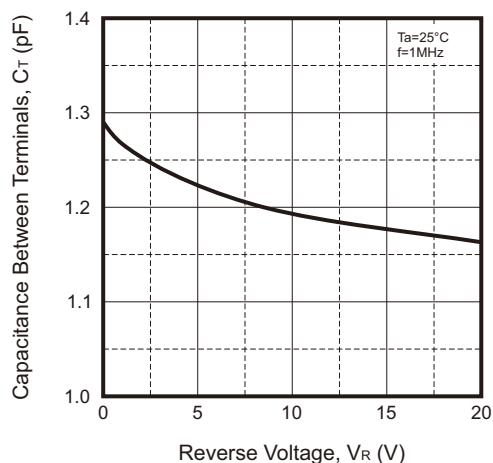
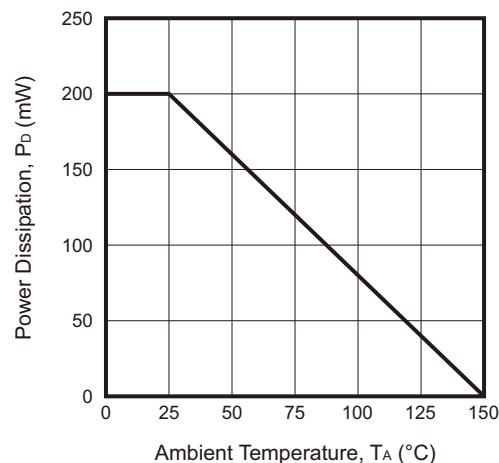
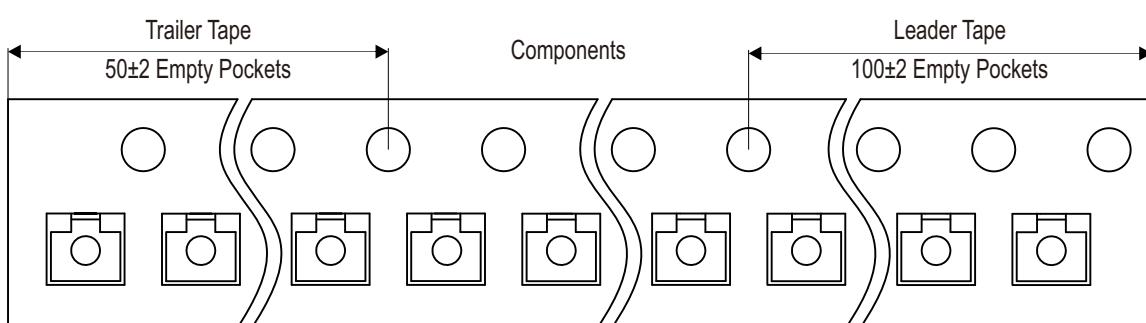
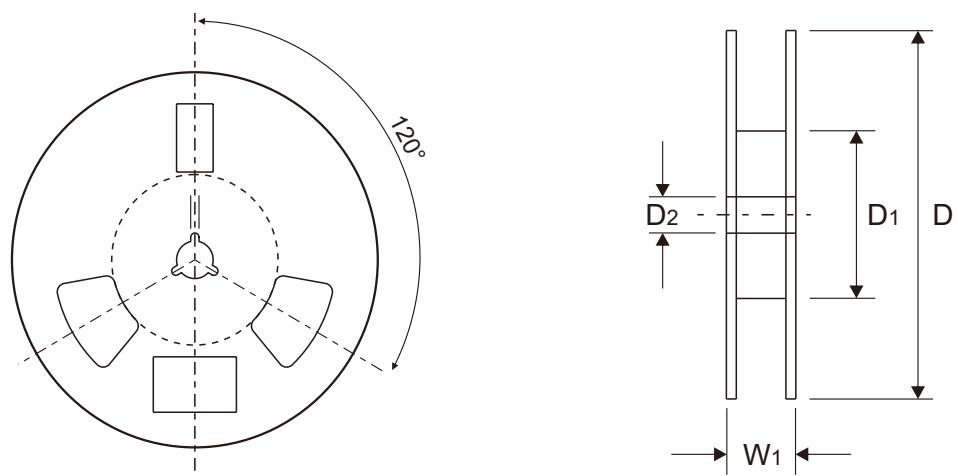
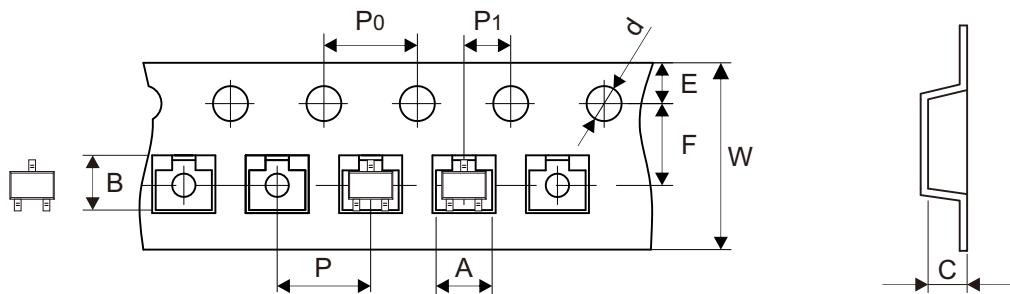


Fig.4 - Power Derating Curve



Reel Taping Specification

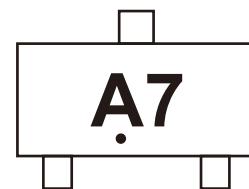


	SYMBOL	A	B	C	d	D	D1	D2
SOT-323	(mm)	2.25 ± 0.05	2.55 ± 0.05	1.19 ± 0.05	1.55 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.089 ± 0.002	0.100 ± 0.002	0.047 ± 0.002	0.061 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

	SYMBOL	E	F	P	P0	P1	W	W1
SOT-323	(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

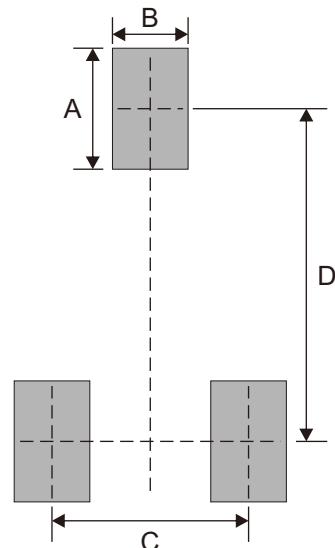
Part Number	Marking Code
CDSV3-217-HF	A7



Solid dot = Control code

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