

Small Signal Switching Diodes

Comchip
SMD Diode Specialist

CDSV3-217-HF

Reverse Voltage: 80 Volts

Forward Current: 300 mA

RoHS Device

Halogen Free



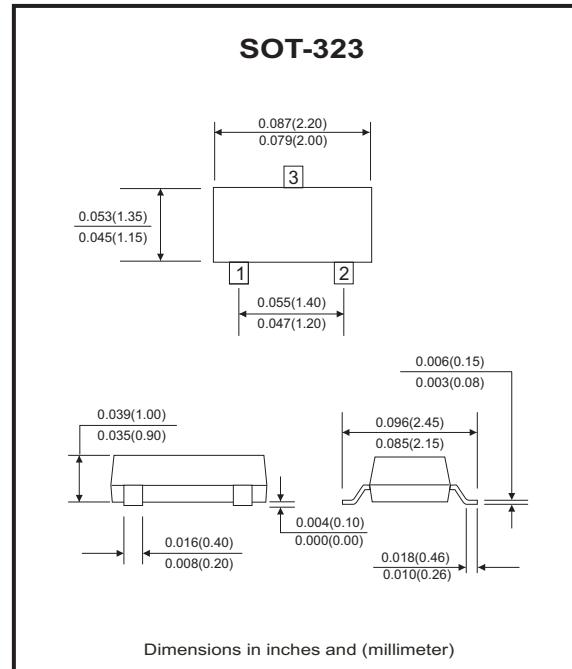
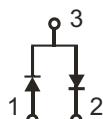
Features

- Designed for mounting on small surface.
- High speed switching.
- High mounting capability, strong surge withstand, high reliability.

Mechanical data

- Case: SOT-323, molded plastic.
- Terminals: Solder plated, solderable per MIL-STD-750, method 208.
- Weight: 0.006 gram(approx.).

Circuit Diagram



Dimensions in inches and (millimeter)

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Peak reverse voltage		V _{RM}			80	V
Reverse voltage		V _R			80	V
Forward current		I _{FM}			300	mA
Average forward current		I _O			100	mA
Forward current, surge peak	T = 10ms	I _{FSM}			1	A
Power dissipation		P _D			200	mW
Storage temperature		T _{STG}	-55		+150	°C
Junction temperature		T _j			+150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I _F = 100mA	V _F			1.2	V
Reverse current	V _R = 70V	I _R			0.2	uA
Reverse breakdown voltage	I _R = 100uA	V _{BR}	80			V
Junction Capacitance	f=1MHz, and 0 VDC reverse voltage	C _T			2	pF

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

REV:A

RATING AND CHARACTERISTIC CURVES (CDSV3-217-HF)

Fig.1 - Forward characteristics

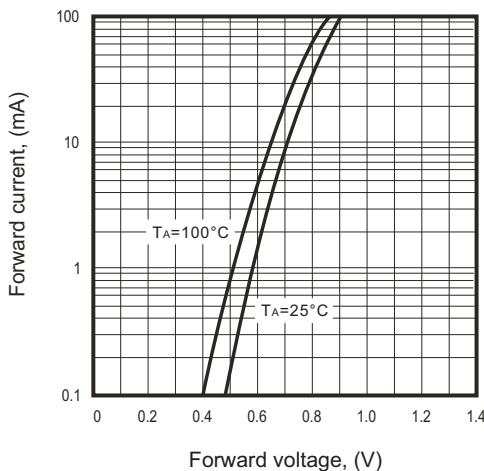


Fig.2 - Reverse characteristics

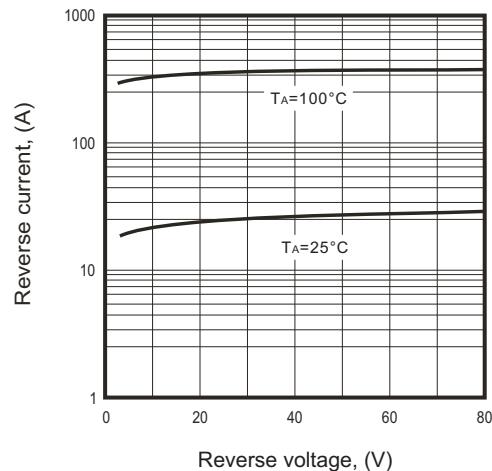


Fig.3 - Capacitance between terminals characteristics

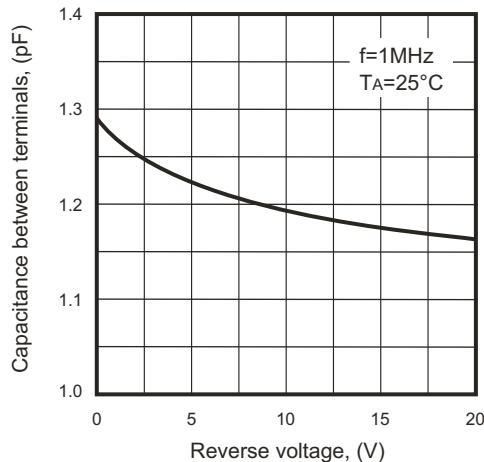
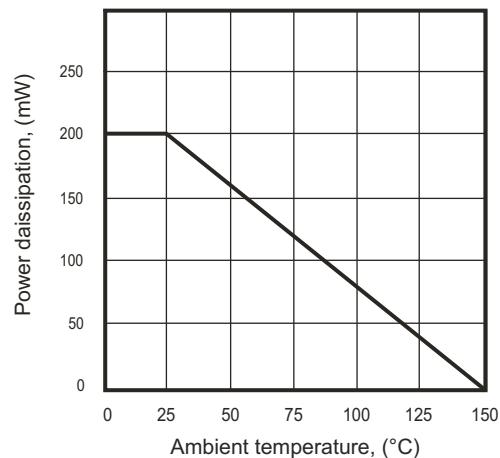
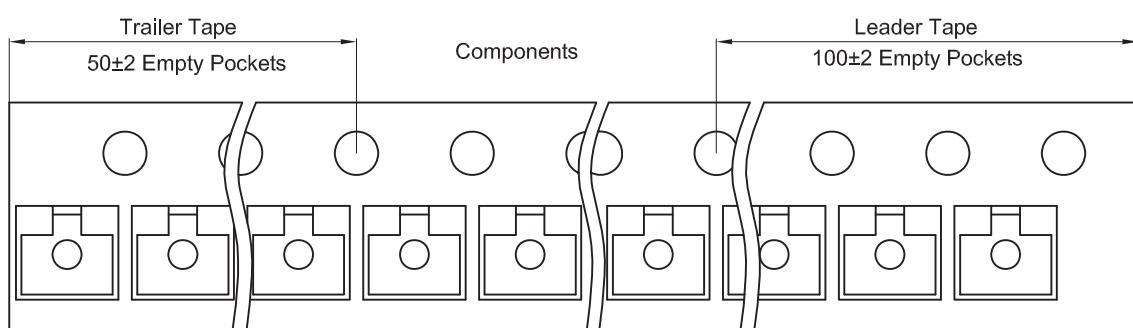
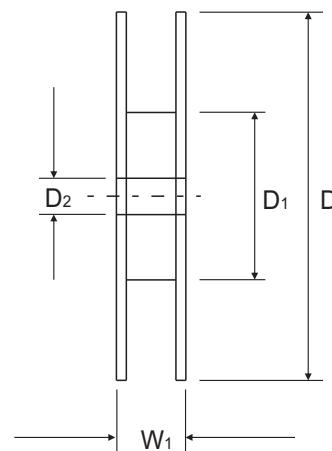
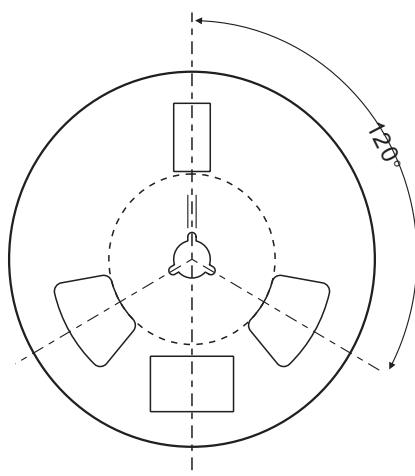
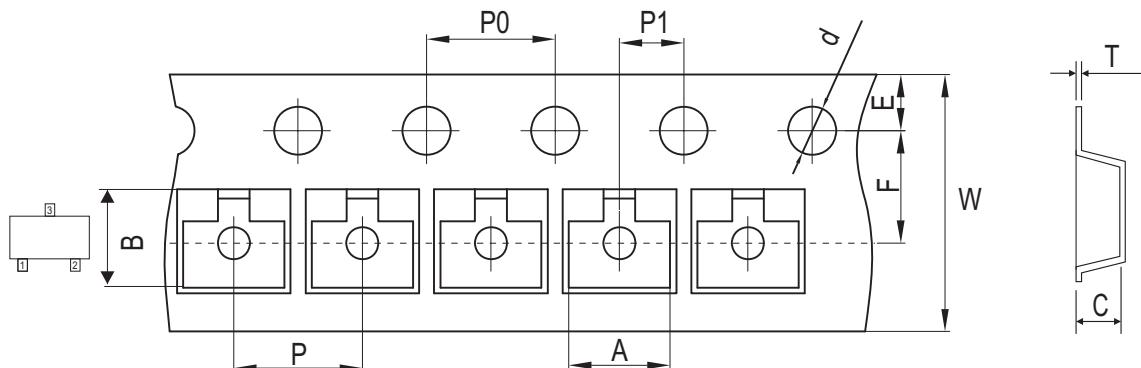


Fig.4 - Power derating curve



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 ± 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

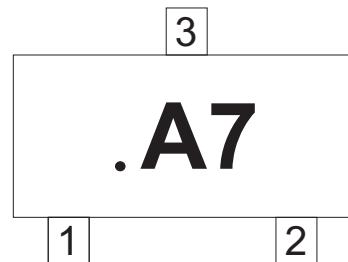
SOT-323	SYMBOL	E	F	P	P0	P1	W	W1
(mm)		1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	$8.00 \pm 0.30 / -0.10$	12.30 ± 1.00
(inch)		0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	$0.315 \pm 0.012 / -0.004$	0.484 ± 0.039

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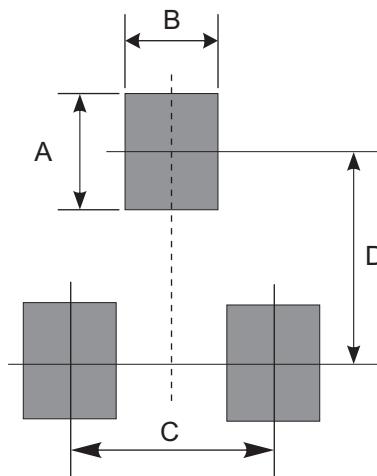
Marking Code

Part Number	Marking Code
CDSV3-217-HF	.A7



Suggested 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