

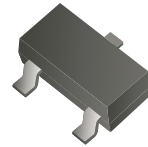
CDSV3-202N-HF/202P-HF

Reverse Voltage: 80 Volts

Power Dissipation: 200 mW

RoHS Device

Halogen Free



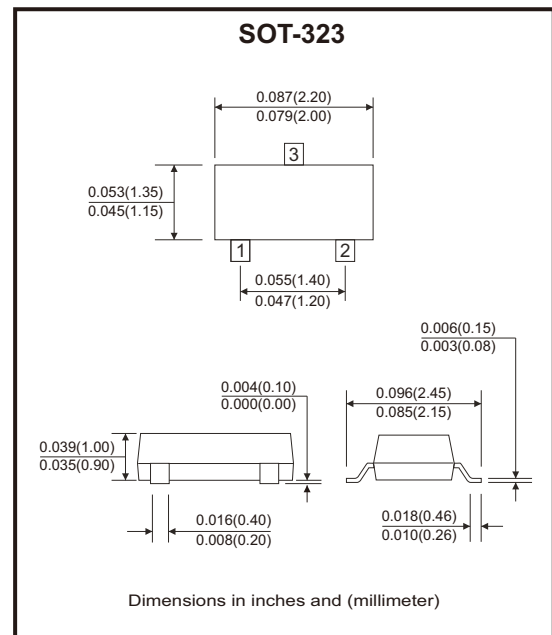
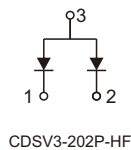
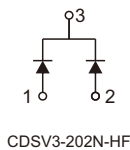
Features

- High speed.
- Suitable for high packing density layout.
- High reliability.

Mechanical data

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

Circuit Diagram



Maximum Ratings (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 from junction to ambient	$R_{\theta JA}$	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	Test Conditions	Symbol	Min	Typ	Max	Unit
Reverse breakdown voltage	$I_R = 100\mu A$	$V_{(BR)}$	80			V
Reverse voltage leakage current	$V_R = 70V$	I_R			0.1	μA
Forward voltage	$I_F = 100mA$	V_F			1.2	V
Diode capacitance	$V_R = 6V, f = 1MHz$	C_D			3.5	pF
Reverse recovery time	$V_R = 6V, I_F = 5mA$	t_{rr}			4	ns

Rating and Characteristic Curves (CDSV3-202N-HF/202P-HF)

Fig.1 - Forward Characteristics
(CDSV3-202N-HF)

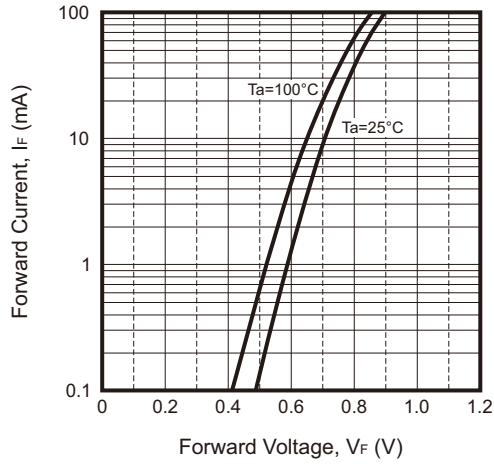


Fig.2 - Reverse Characteristics
(CDSV3-202N-HF)

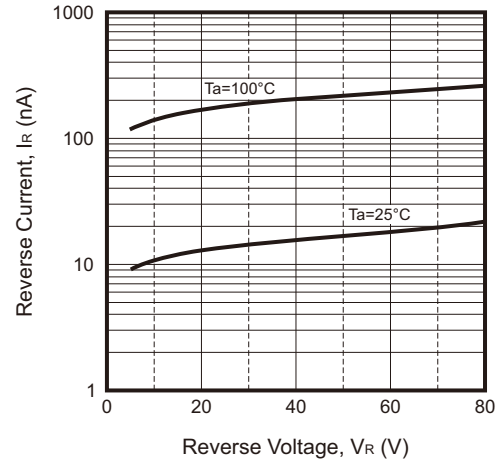


Fig.3 - Forward Characteristics
(CDSV3-202P-HF)

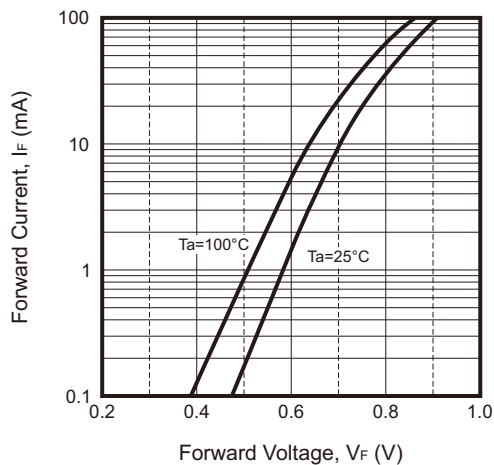


Fig.4 - Reverse Characteristics
(CDSV3-202P-HF)

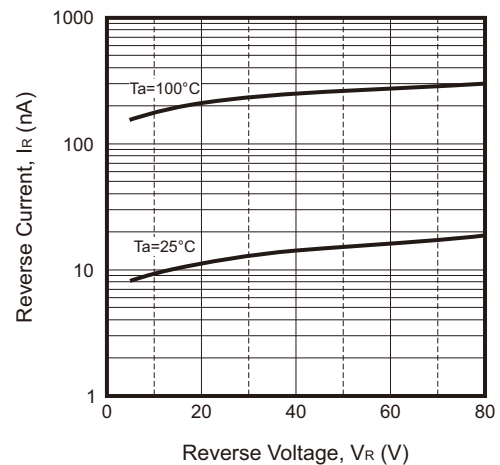


Fig.5 - Capacitance Characteristics

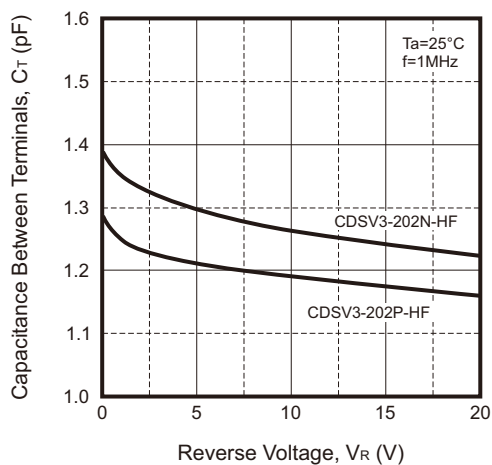
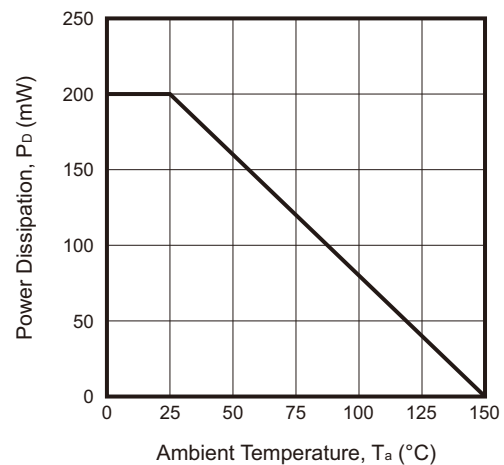
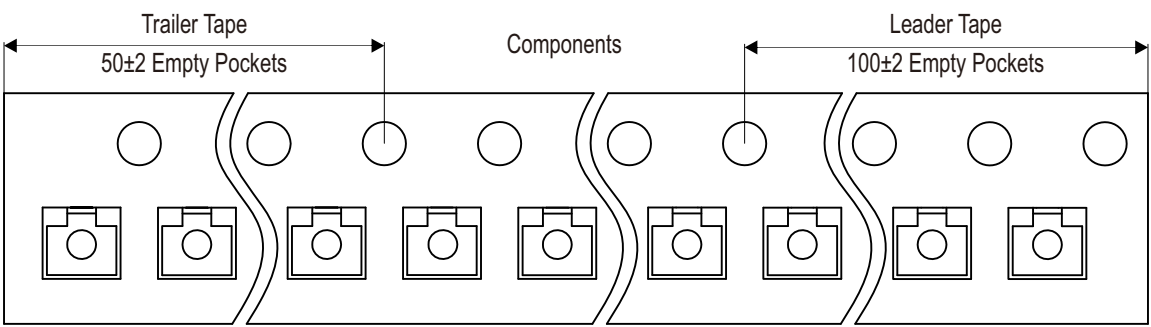
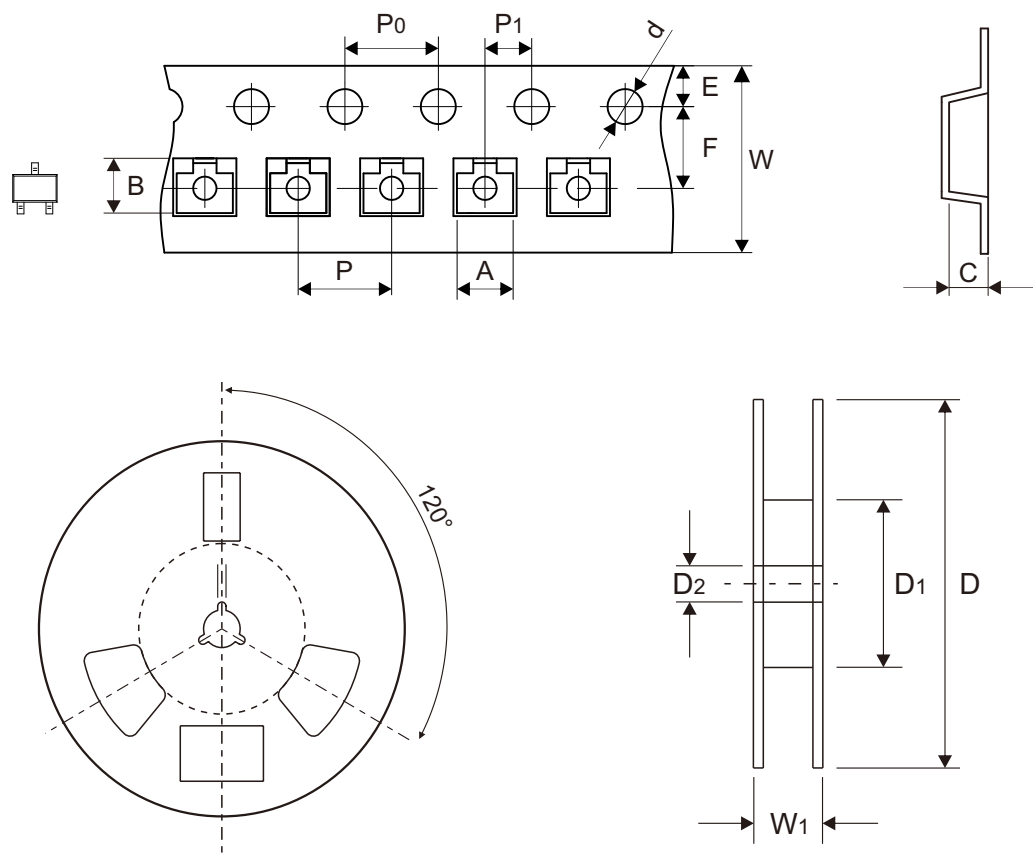


Fig.6 - Power Derating Curve



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

Reel Taping Specification

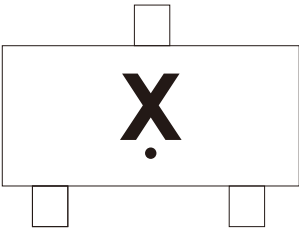


SOT-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.25 ± 0.05	2.55 ± 0.05	1.19 ± 0.05	1.55 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.089 ± 0.002	0.100 ± 0.002	0.047 ± 0.002	0.061 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

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

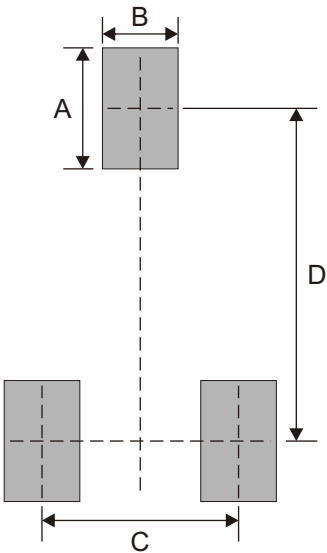
Part Number	Marking Code
CDSV3-202N-HF	N
CDSV3-202P-HF	P



Solid dot = Control code
x = Product type marking 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