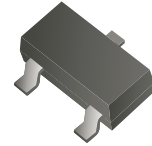


CDSH3-222N-G/222P-G

Reverse Voltage: 80 Volts

Power Dissipation: 150 mW

RoHS Device



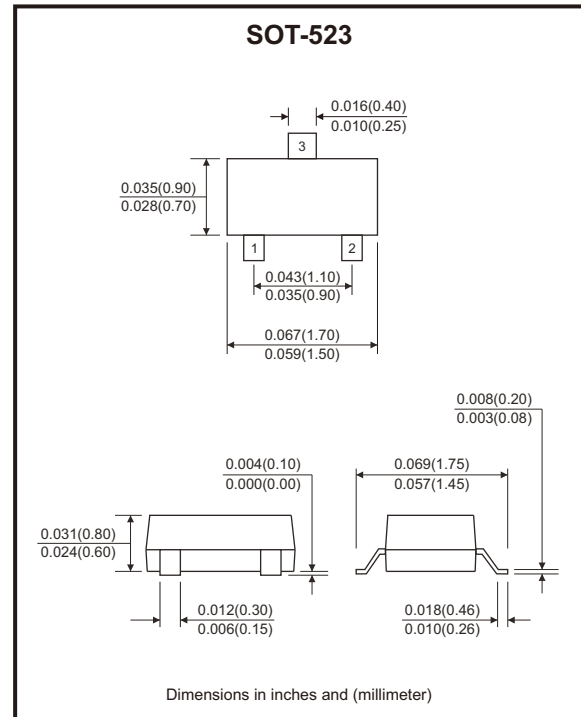
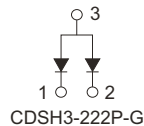
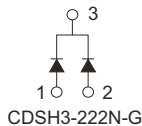
Features

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

Mechanical data

- Case: SOT-523, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Weight: 0.002 grams approx.

Circuit diagram



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

Parameter	Symbol	Conditions	Value	Units
Repetitive peak reverse voltage	V_{RRM}		80	V
Reverse voltage	V_R		80	V
Peak forward current	I_{FM}		300	mA
Peak surge forward current	I_{FSM}	T=1.0 sec	2	A
Power dissipation	P_D		150	mW
Average rectified output current	I_o		100	mA
Maximum forward voltage	V_F	@ $I_F=100mA$	1.2	V
Maximum reverse current	I_R	@ $V_R=70V$	0.1	μA
Maximum reverse recovery time	T_{rr}	$I_F=I_R=5mA$, $R_L=100\Omega$, $I_{rr}=0.1 \times I_R$, $V_R=6V$	4	nS
Maximum diode capacitance	C_J	$V_R=6V$, $f=1.0MHz$	3.5	pF
Maximum junction temperature	T_J		150	°C
Storage temperature range	T_{STG}		-55 to +150	°C

Rating and Characteristic Curves (CDSH3-222N-G/222P-G)

Fig.1 - Forward Characteristics
(P type)

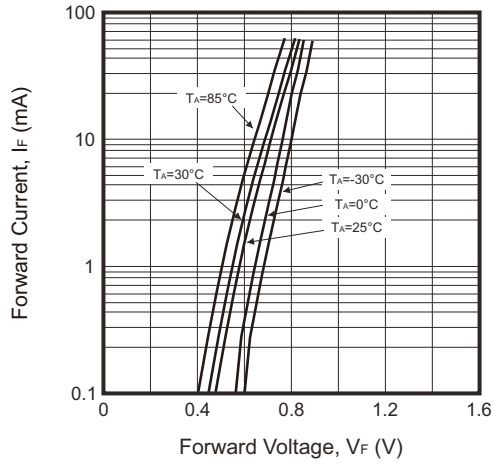


Fig.2 - Reverse Characteristics
(P type)

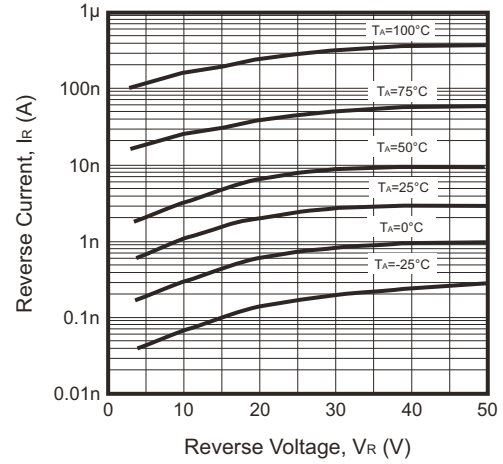


Fig.3 - Forward Characteristics
(N type)

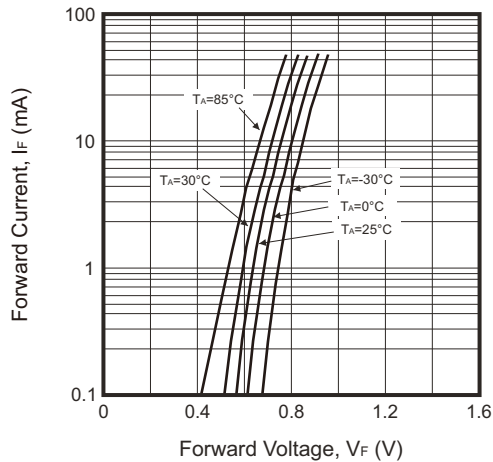


Fig.4 - Reverse Characteristics
(N type)

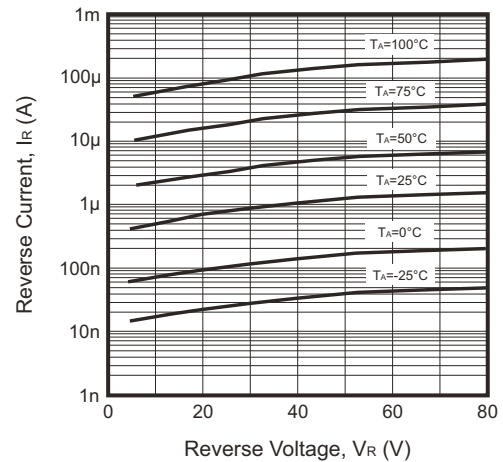


Fig.5 - Capacitance Characteristics

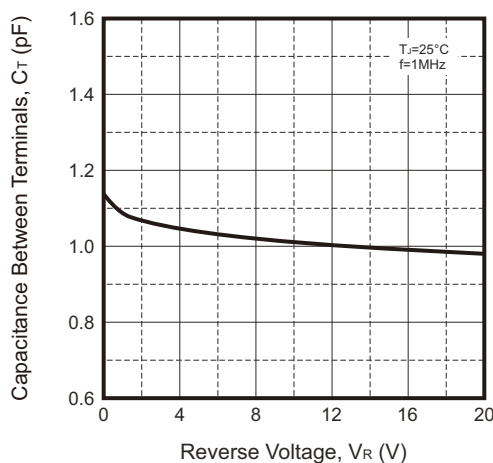
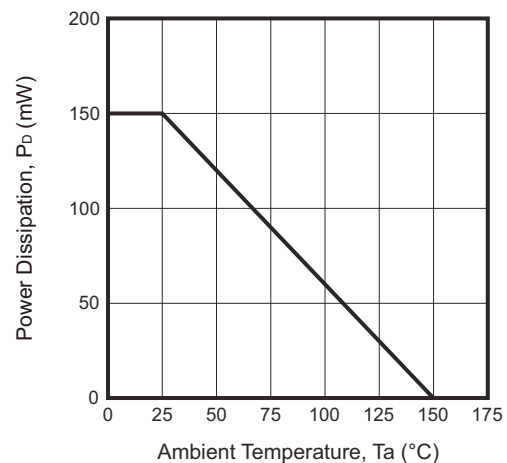
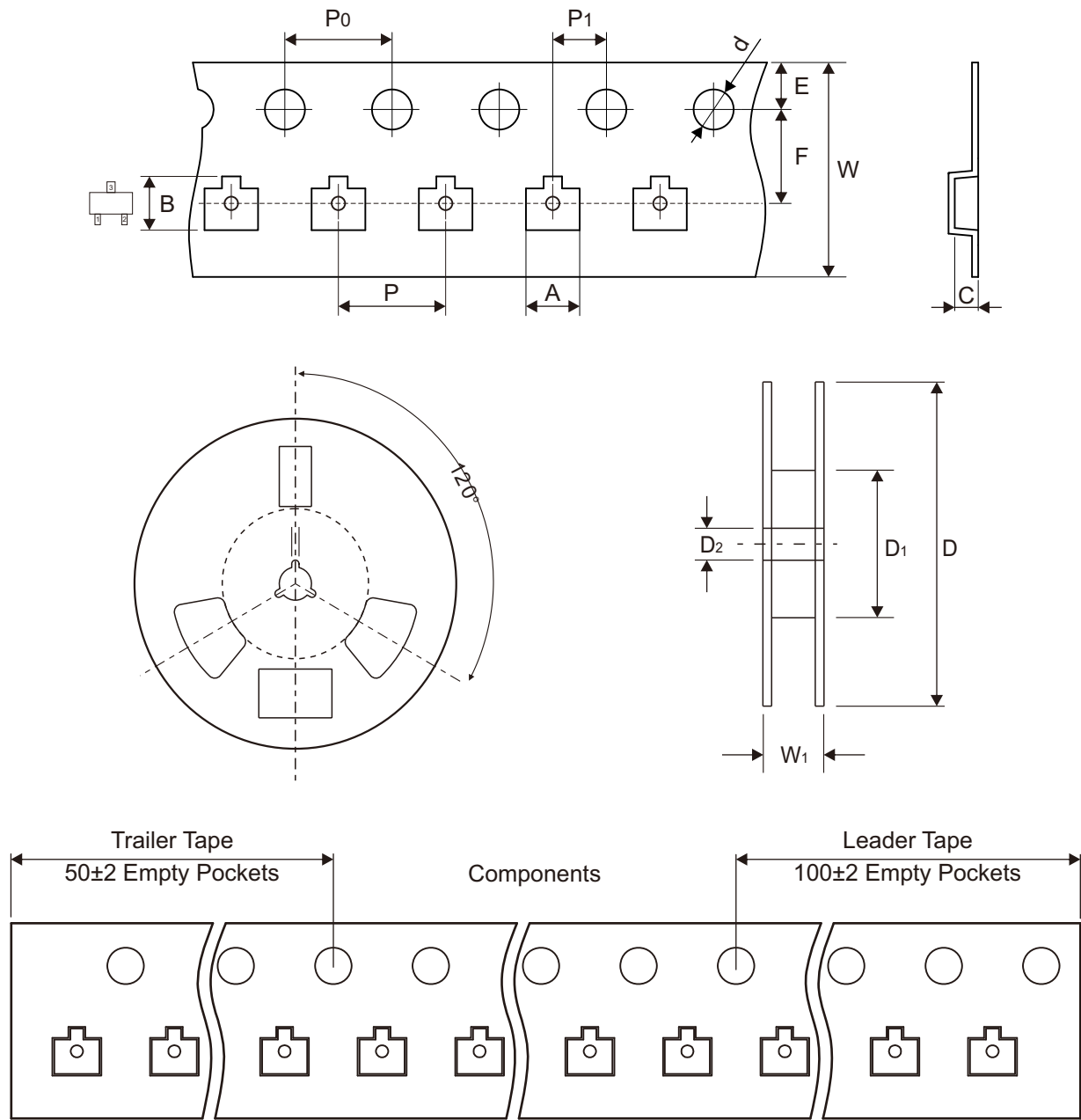


Fig.6 - Power Derating Curve



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

Reel Taping Specification

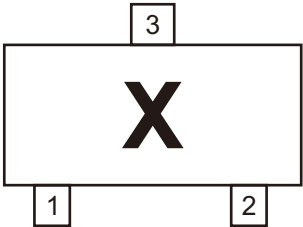


SOT-523	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.85 ± 0.05	1.85 ± 0.05	0.875 ± 0.05	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.073 ± 0.002	0.073 ± 0.002	0.034 ± 0.002	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOT-523	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

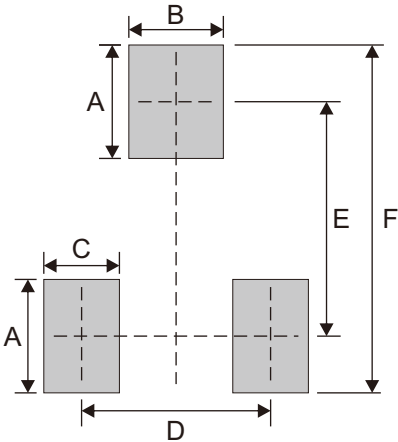
Part Number	Marking Code
CDSH3-222N-G	N
CDSH3-222P-G	P



X = Product type marking code

Suggested PAD Layout

SIZE	SOT-523	
	(mm)	(inch)
A	0.60	0.024
B	0.50	0.020
C	0.40	0.016
D	1.00	0.039
E	1.24	0.049
F	1.84	0.072



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-523	3,000	7