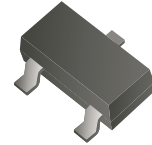


CDSH3-16-G

Reverse Voltage: 75 V

Forward Current: 150 mA

RoHS Device



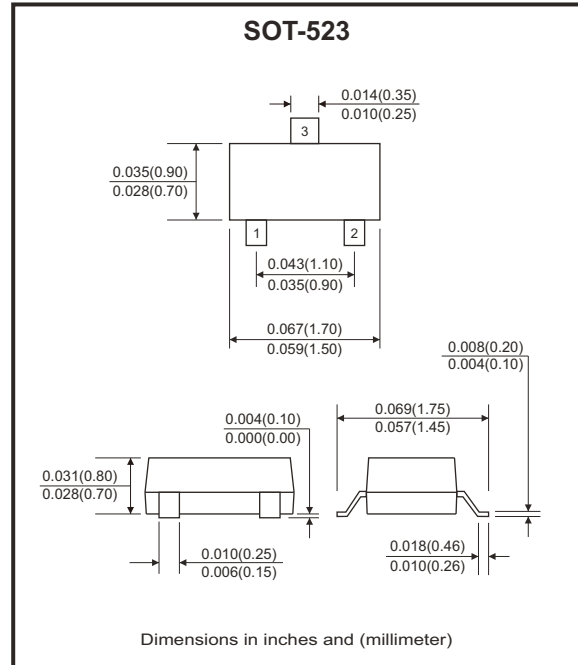
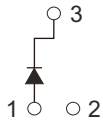
Features

- Fast switching speed.
- For general purpose switching applications.
- High conductance.

Mechanical data

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

Circuit Diagram



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

Parameter	Symbol	Value	Unit
Non-repetitive peak reverse voltage	V _{RM}	100	V
Peak repetitive peak reverse voltage	V _{RPM}	75	V
Working peak reverse voltage	V _{RWM}		
DC blocking voltage	V _R		
RMS reverse voltage	V _{R(RMS)}	53	V
Forward continuous current	I _{FM}	300	mA
Average rectified output current	I _o	150	mA
Non-repetitive peak forward surge current @ t=8.3ms	I _{FSM}	2	A
Power dissipation	P _D	200	mW
Thermal resistance from junction to ambient	R _{θJA}	625	°C/W
Junction temperature	T _j	150	°C
Storage temperature range	T _{STG}	-55 ~ +150	°C

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V(BR)	I _R = 1μA	75			V
Forward voltage	V _{F1}	I _F = 1mA			0.715	V
	V _{F2}	I _F = 10mA			0.855	
	V _{F3}	I _F = 50mA			1.0	
	V _{F4}	I _F = 150mA			1.25	
Reverse current	I _{R1}	V _R = 75V			1	μA
	I _{R2}	V _R = 20V			25	nA
Capacitance between terminals	C _T	V _R = 0V, f = 1MHz			2	pF
Reverse recovery time	T _{RR}	I _F = I _R = 10mA, I _{rr} = 0.1 X I _R , R _L = 100Ω			4	ns

Rating and Characteristic Curves (CDSH3-16-G)

Fig.1 - Forward Characteristics

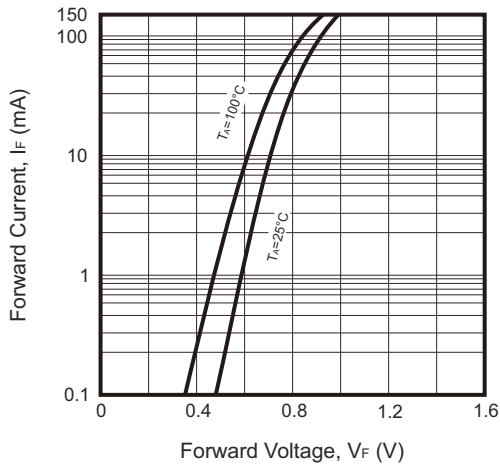


Fig.2 - Reverse Characteristics

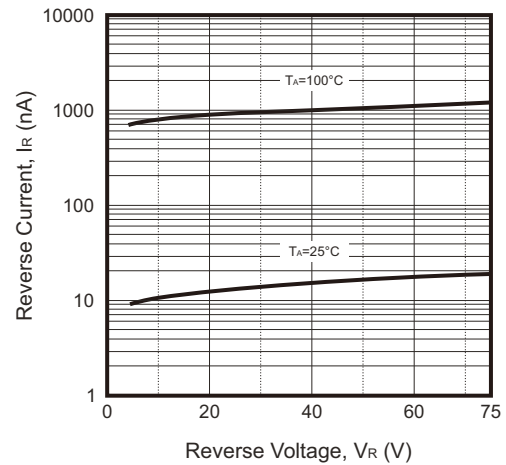


Fig.3 -Capacitance Characteristics

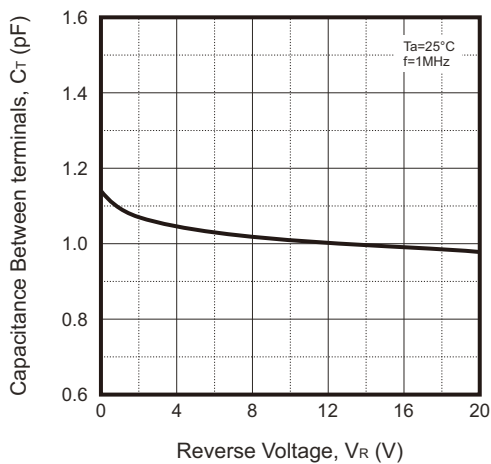
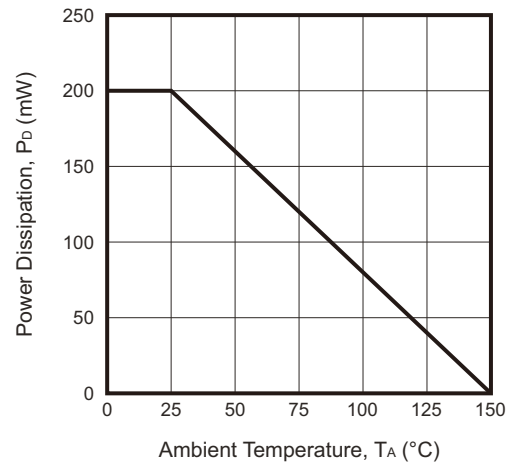
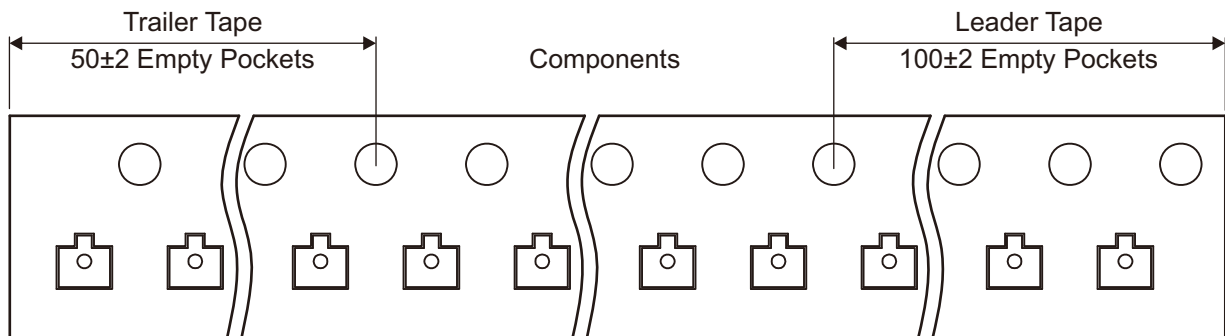
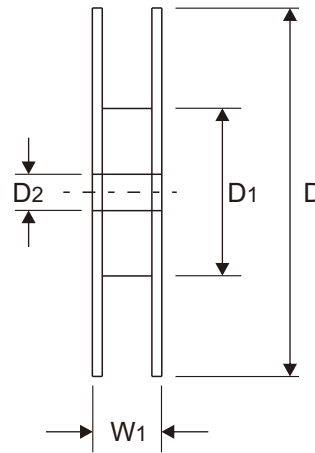
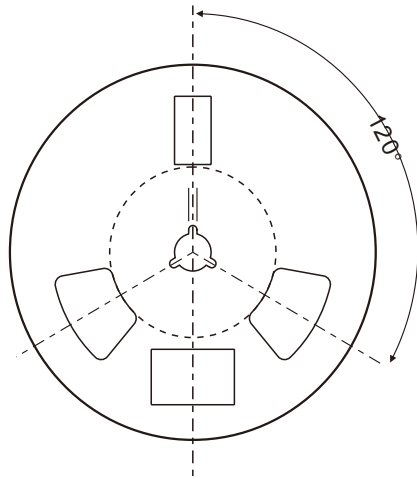
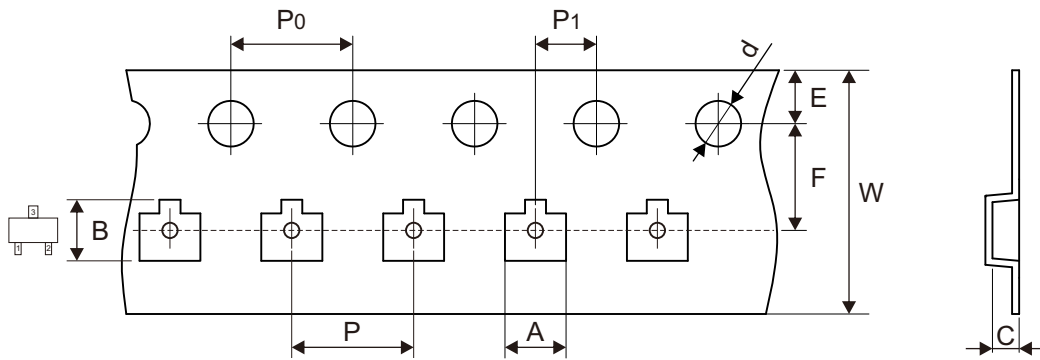


Fig.4 - Power Derating Curve



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

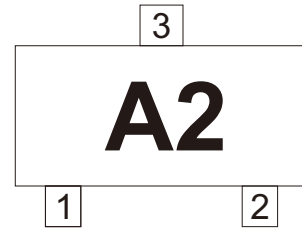
SOT-523	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 + 0.30 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 + 0.012 - 0.004	0.484 ± 0.039

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

REV:A

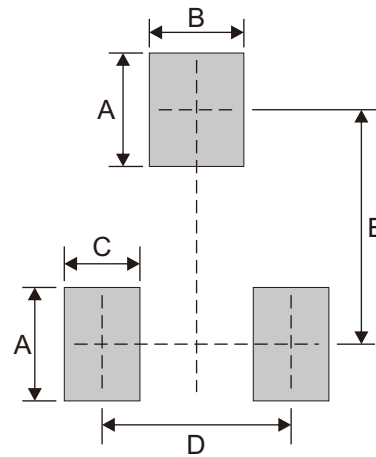
Marking Code

Part Number	Marking Code
CDSH3-16-G	A2



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



Standard Packaging

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