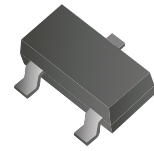


CDSH3-16-G/56-G/70-G/99-G

Reverse Voltage: 85 Volts

Forward Current: 155 mA

RoHS Device



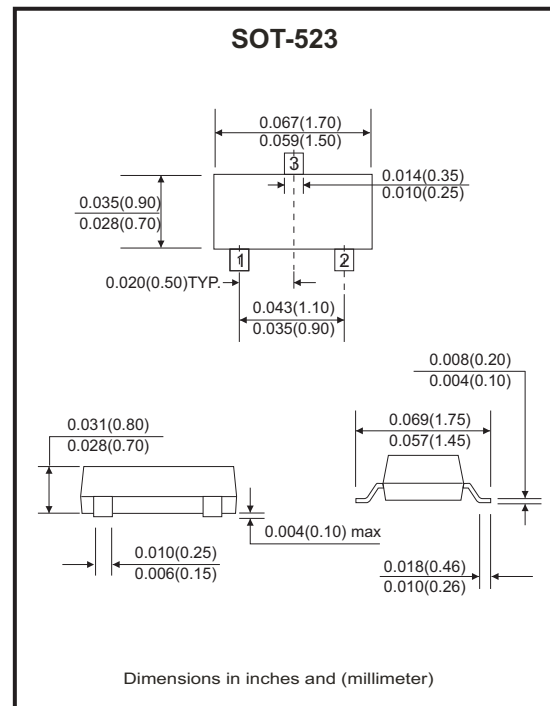
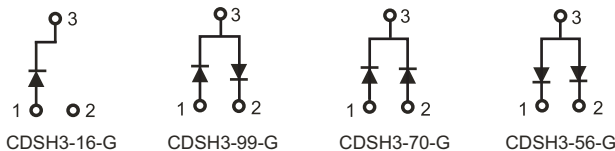
Features

- 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.
- Approx. weight: 0.002 grams

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}		85	V
Reverse voltage	V_R		85	V
Forward current	I_F		155	mA
Peak surge forward current	I_{FSM}	$T=1.0 \mu S$	4	A
Power dissipation	P_D		150	mW
Maximum forward voltage	V_F	@ $I_F=1mA$ @ $I_F=10mA$ @ $I_F=50mA$ @ $I_F=100mA$	0.715 0.855 1.0 1.25	V
Maximum reverse current	I_R	@ $V_R=20V$ @ $V_R=75V$ @ $V_R=25V, T_J=150^\circ C$ @ $V_R=75V, T_J=150^\circ C$	0.03 2.0 60 100	μA
Maximum reverse recovery time	T_{rr}	$I_F=10mA, V_R=6V, R_L=100\Omega$	4	nS
Typical diode capacitance	C_J	$V_R=0V, f=1.0MHz$	1.5	pF
Maximum junction temperature	T_J		150	$^\circ C$
Storage temperature	T_{STG}		-55 to +150	$^\circ C$

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

REV:A

RATING AND CHARACTERISTIC CURVES (CDSH3-16-G/56-G/70-G/99-G)

Fig.1 - Forward Characteristics

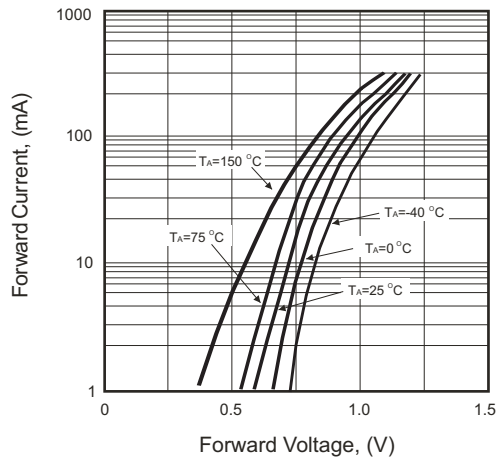


Fig.2 - Reverse Characteristics

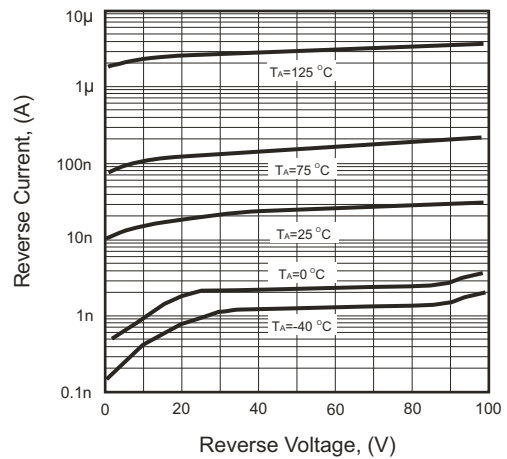


Fig.3 - Capacitance Between Terminals Characteristics

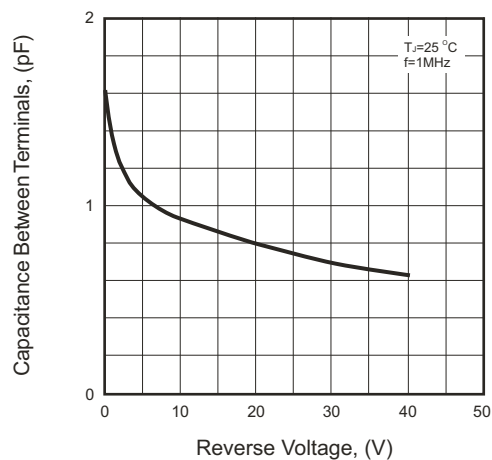
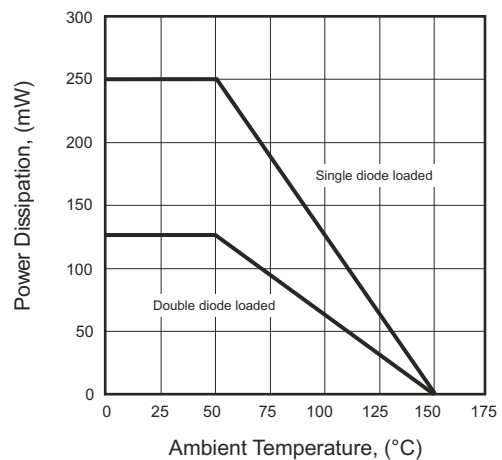
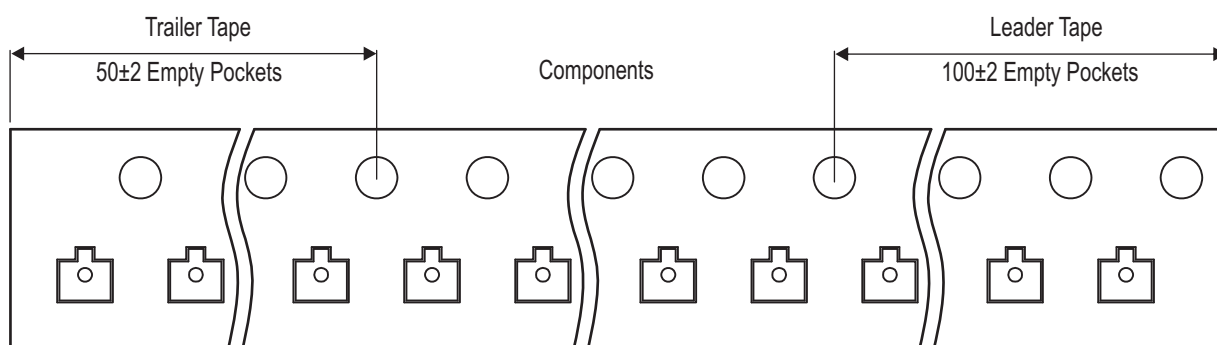
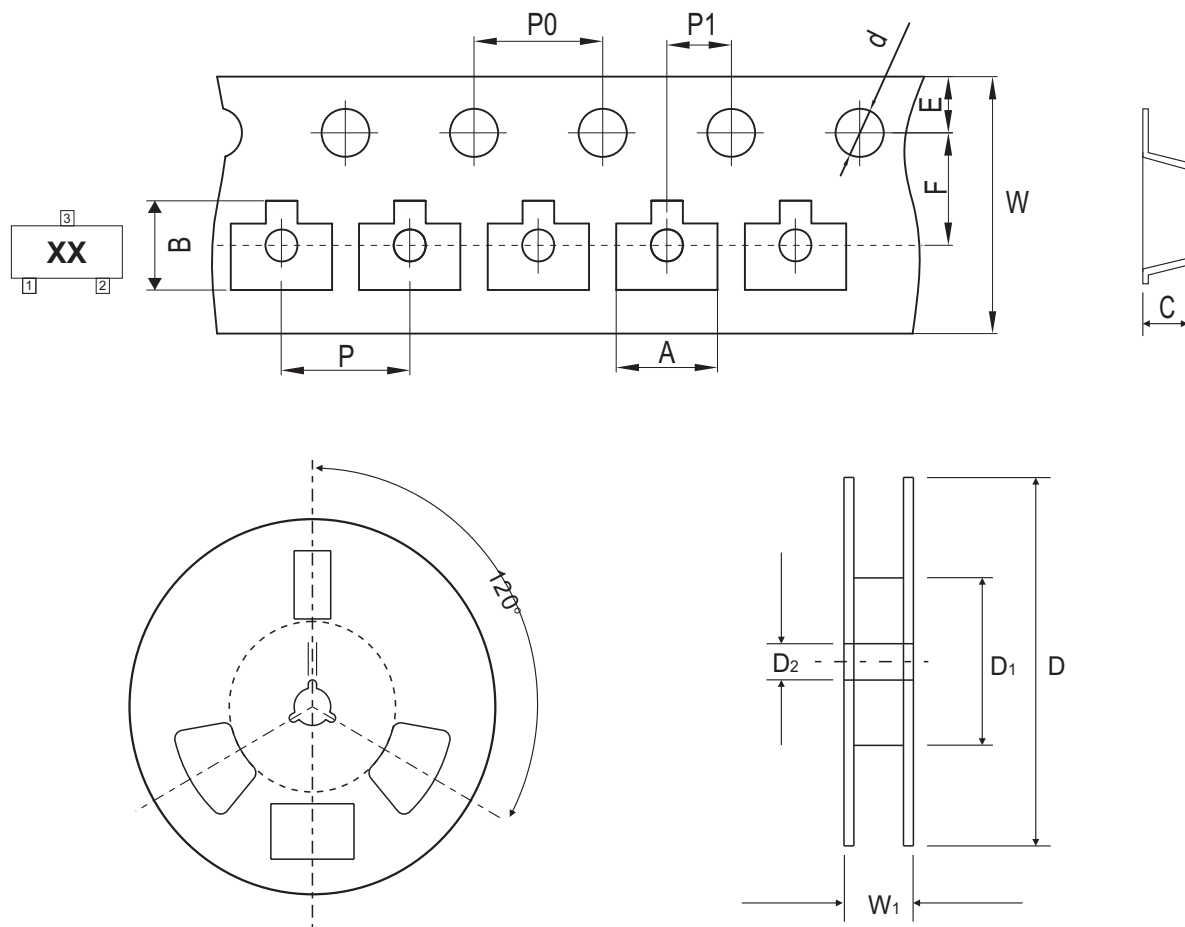


Fig.4 - Power Derating Curve



Reel Taping Specification

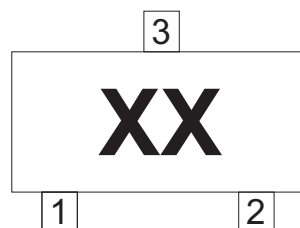


SOT-523	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.85 ± 0.05	1.85 ± 0.05	0.88 ± 0.05	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.073 ± 0.002	0.073 ± 0.002	0.035 ± 0.002	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

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

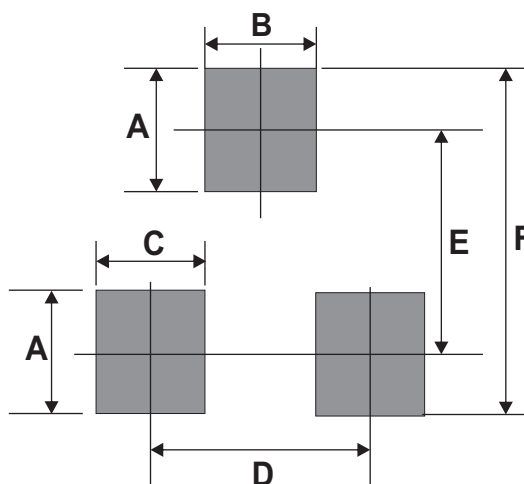
Part Number	Marking Code
CDBH3-16-G	A2
CDBH3-56-G	JD
CDBH3-70-G	JJ
CDBH3-99-G	JE



xx = 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