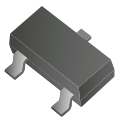
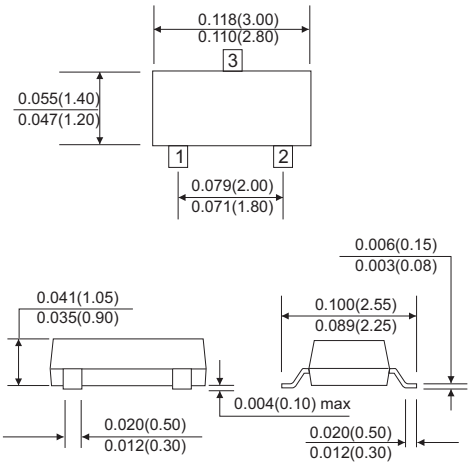
ACDST-99-G/70-G

Reverse Voltage: 70 Volts
Forward Current: 200 mA
RoHS Device



SOT-23



Dimensions in inches and (millimeter)

Features

-Fast switching speed.

-High mounting capability, strong surge withstand, high reliability.

-Comply with AEC-Q101.

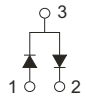
Mechanical data

-Case: SOT-23, molded plastic.

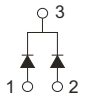
-Terminals: solderable per MIL-STD-750, method 2026.

-Approx. weight: 0.0078 grams

Circuit diagram



ACDST-99-G



ACDST-70-G

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

Parameter	Symbol	Limit	Units
Reverse voltage	V_R	70	V
Forward current	I_F	200	mA
Peak forward surge current	I_{FSM}	500	mA
Power dissipation	P_D	225	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	556	°C/W
Junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-55 to +150	°C

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

Parameter	Symbol	Conditions	Min.	Max.	Units
Reverse breakdown voltage	V_{BR}	I_R=100μA	70		V
Forward voltage	V_F	@I_F=1mA @I_F=10mA @I_F=50mA @I_F=150mA		0.715 0.855 1.0 1.25	V
Reverse current	I_R	@V_R=70V		2.5	μA
Reverse recovery time	t_{rr}	I_F=I_R=10mA, Irr=0.1×I_R, R_L=100Ω		6	nS
Capacitance between terminals	C_T	V_R=0V, f=1.0MHz		1.5	pF

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RATING AND CHARACTERISTIC CURVES (ACDST-99-G/70-G)

Fig.1 - Forward Characteristics

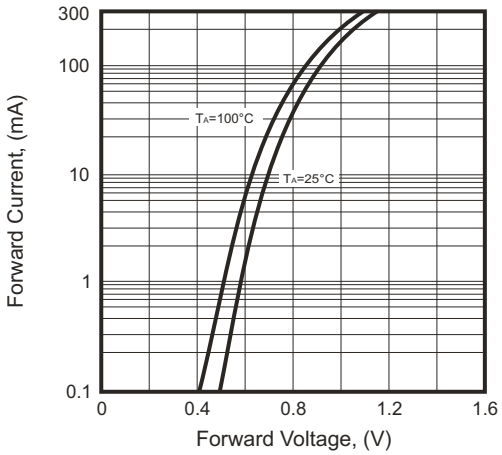


Fig.2 - Reverse Characteristics

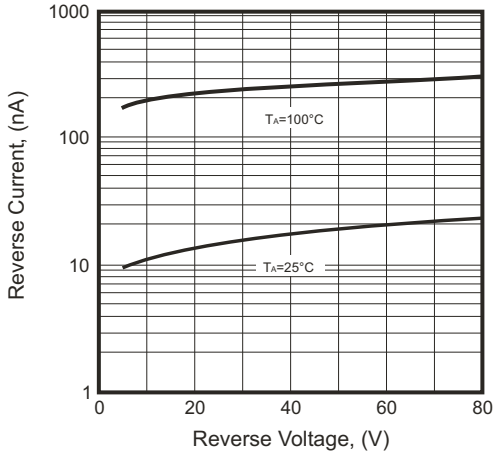


Fig.3 - Capacitance Between Terminals Characteristics

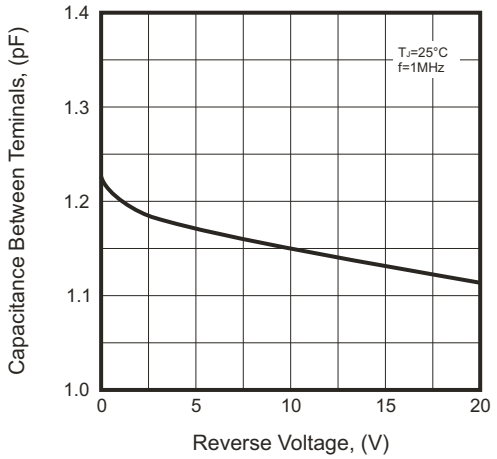
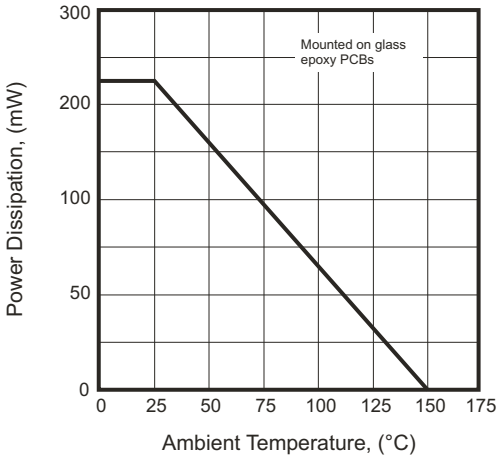
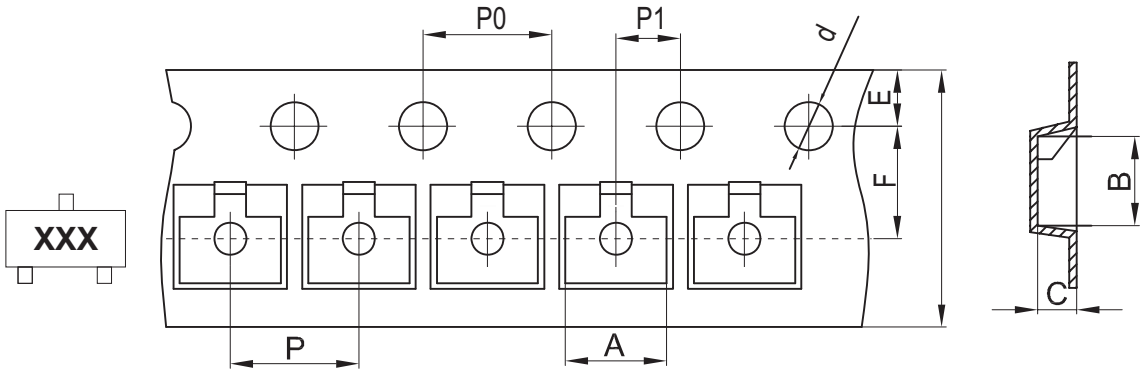


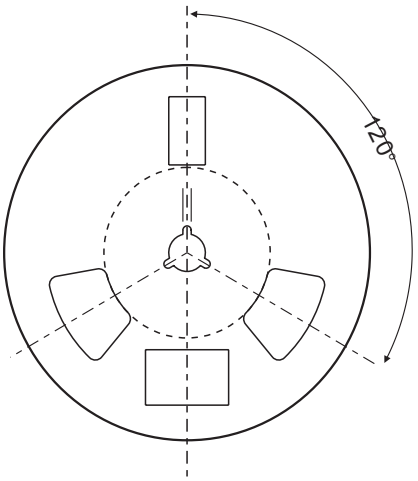
Fig.4 - Power Derating Curve

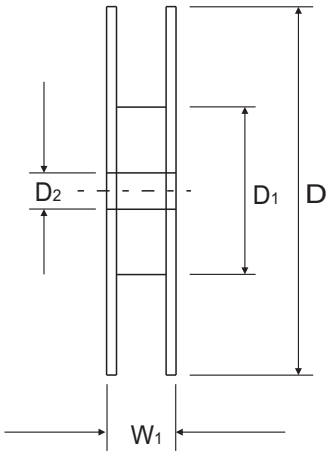


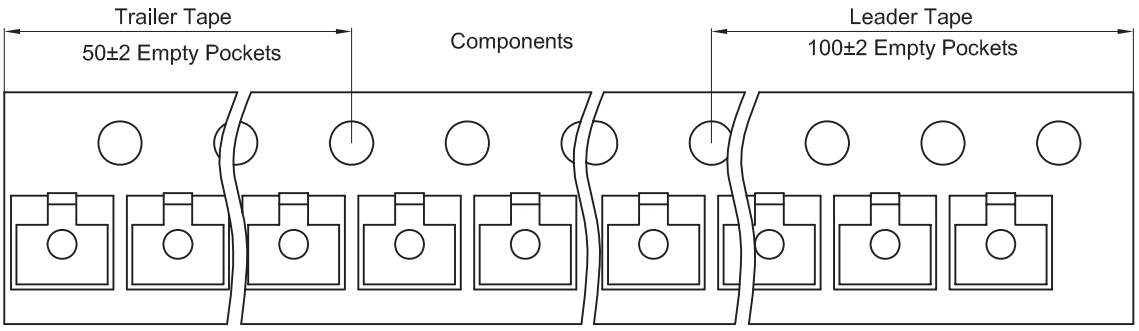
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Reel Taping Specification









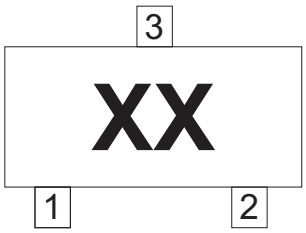
	SYMBOL	A	B	C	d	D	D1	D2
SOT-23	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 + 0.10	178 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 + 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

	SYMBOL	E	F	P	P0	P1	W	W1
SOT-23	(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 ± 1.0
	(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

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Marking Code

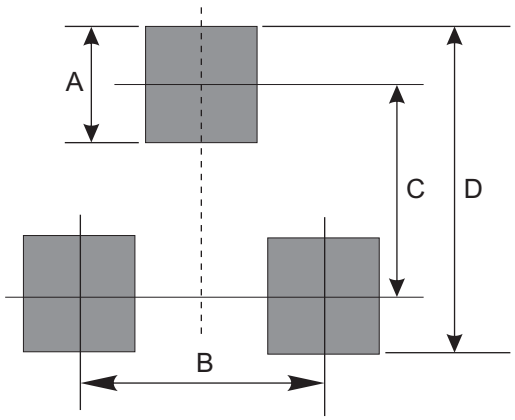
Part Number	Marking Code
ACDST-99-G	A7
ACDST-70-G	A4



xx = Product type marking code

Suggested PAD Layout

SIZE	SOT-23	
	(mm)	(inch)
A	0.80	0.031
B	1.90	0.075
C	2.02	0.080
D	2.82	0.111



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-23	3,000	7

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