



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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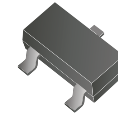
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ACDST-99-G/70-G

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



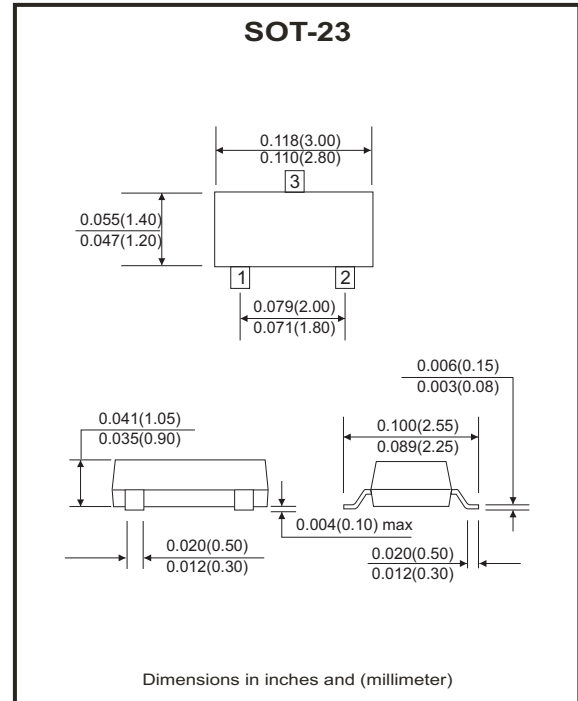
Features

- 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



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}	$I_R=100\mu A$	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}	$I_F=I_R=10mA$, $I_{rr}=0.1 \times I_R$, $R_L=100\Omega$		6	nS
Capacitance between terminals	C_T	$V_R=0V$, $f=1.0MHz$		1.5	pF

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

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

Fig.1 - Forward Characteristics

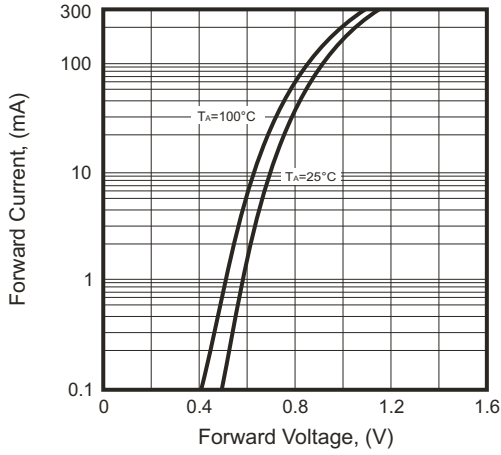


Fig.2 - Reverse Characteristics

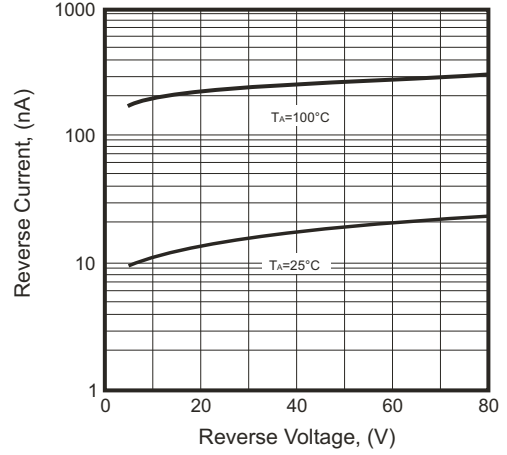


Fig.3 - Capacitance Between Terminals Characteristics

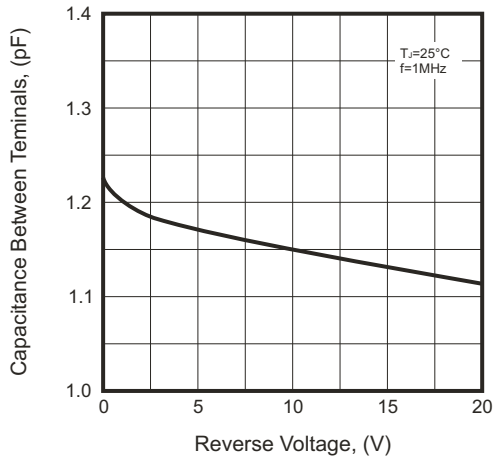
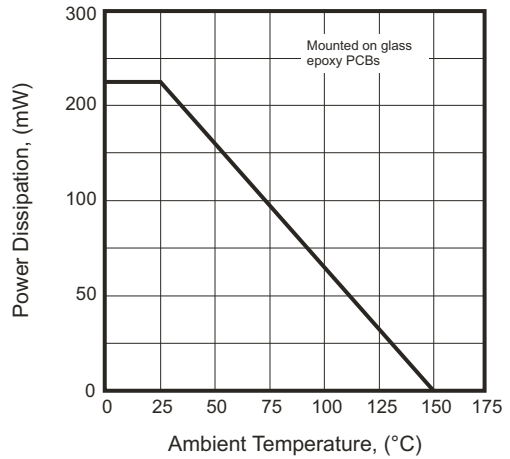
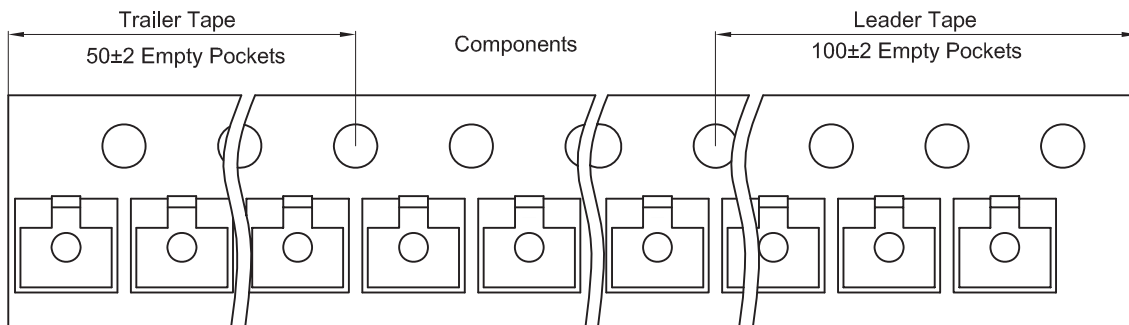
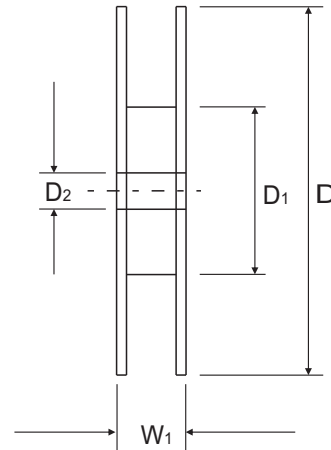
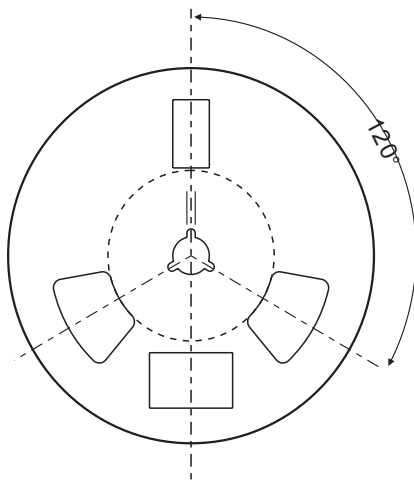
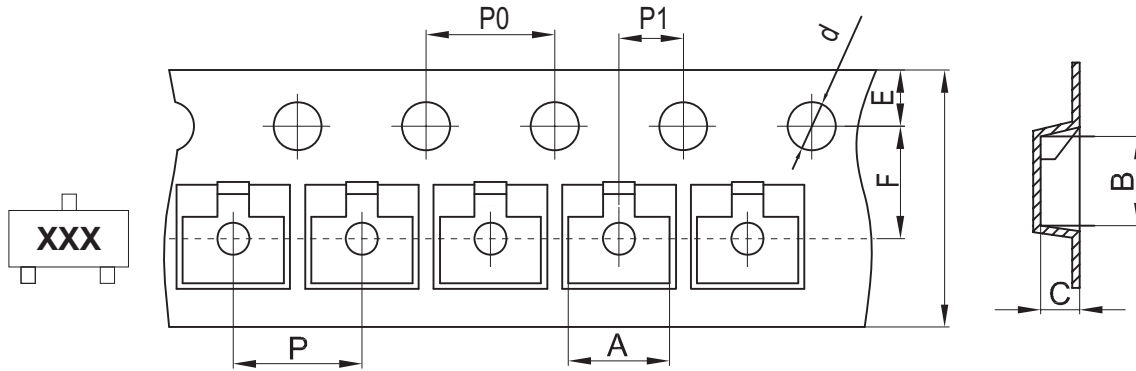


Fig.4 - Power Derating Curve



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Reel Taping Specification



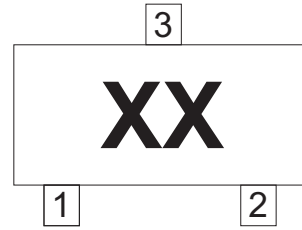
SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 ± 0.10	178 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOT-23	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 ± 1.0
	(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

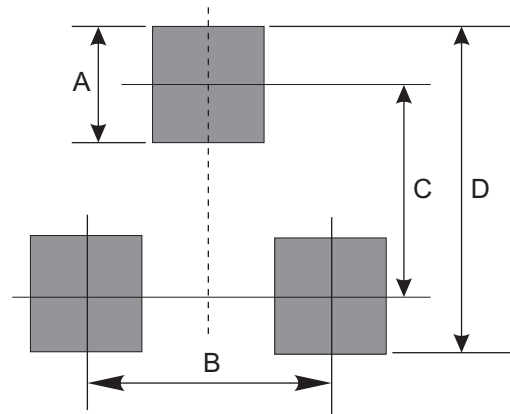
Part Number	Marking Code
ACDST-99-G	A7
ACDST-70-G	A4



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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