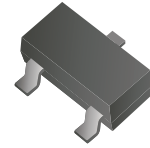


## ACDSV3-99-G

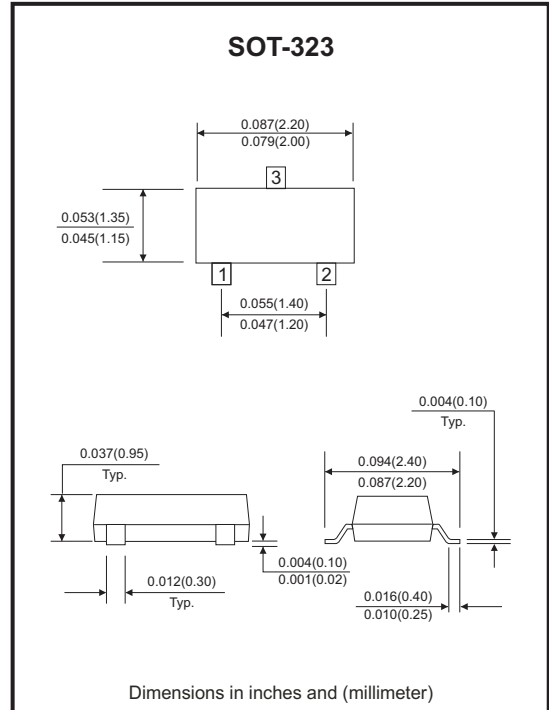
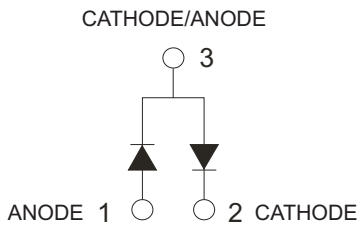
RoHS Device



### Features

- Fast switching speed.
- High conductance.
- Connected in series.
- For general purpose switching application.
- Surface mount package ideally suited for automatic insertion.
- Comply with AEC-Q101

### Circuit diagram



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

Parameter	Symbol	Value	Unit
Non repetitive peak reverse voltage	$V_{RM}$	100	V
Repetitive peak reverse voltage	$V_{RRM}$	75	V
Working peak reverse voltage	$V_{RWM}$		
DC reverse voltage	$V_R$		
Peak forward surge current	$I_{FSM}$	1.0	A
		2.0	
Average rectified output current	$I_o$	150	mA
Power dissipation	$P_D$	200	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	625	°C/W
Operating and storage temperature range	$T_J, T_{STG}$	-55 to +150	°C

## Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=2.5\mu\text{A}$	75		V
Reverse voltage leakage current	$I_R$	$V_R=75\text{V}$		2.5	$\mu\text{A}$
		$V_R=20\text{V}$		25	nA
Forward voltage	$V_F$	$I_F=1\text{mA}$		715	mV
		$I_F=10\text{mA}$		855	
		$I_F=50\text{mA}$		1000	
		$I_F=150\text{mA}$		1250	
Junction Capacitance	$C_J$	$V_R=0\text{V}$ , $f=1.0\text{MHz}$		2.0	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1 \cdot I_R$ , $R_L=100\Omega$		4	nS

## RATING AND TYPICAL CHARACTERISTIC CURVES (ACDSV3-99-G)

Fig.1 - Forward Characteristic

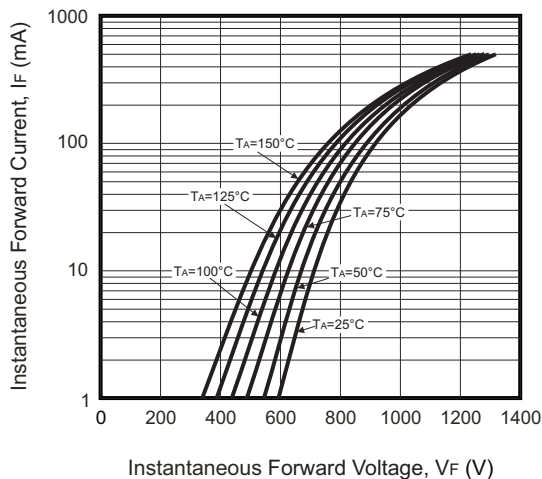


Fig.2 - Typical Reverse Characteristic

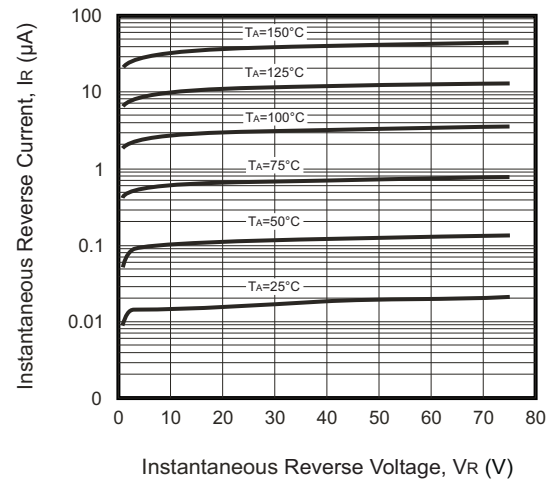


Fig.3 - Typical Capacitance vs. Reverse Voltage

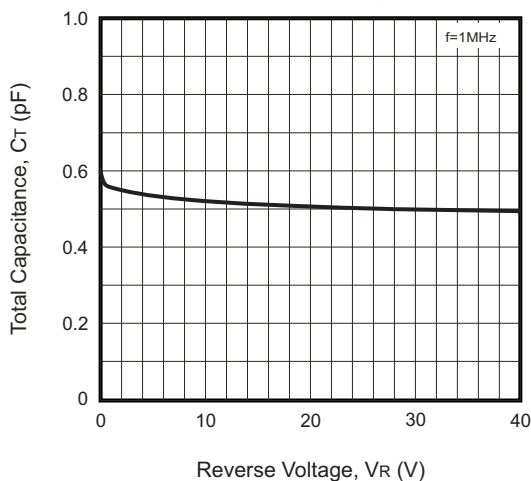
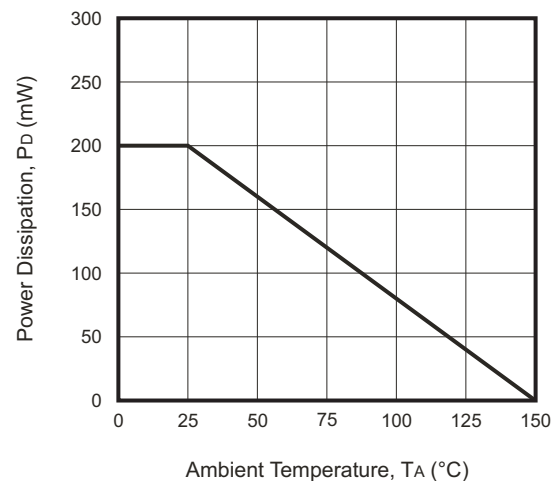


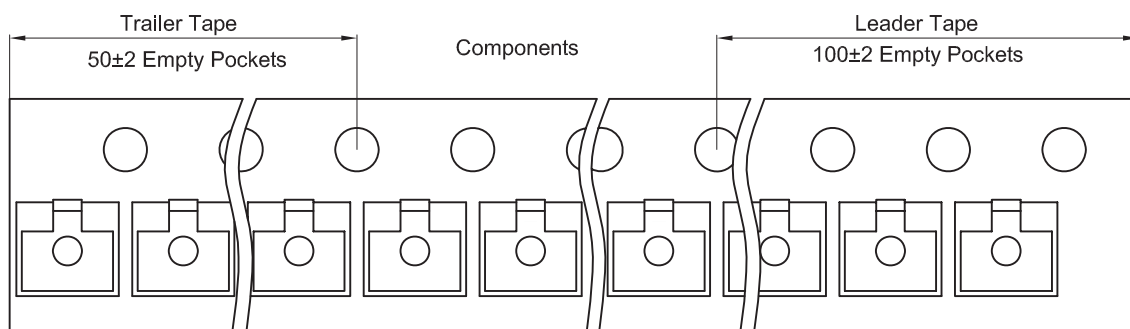
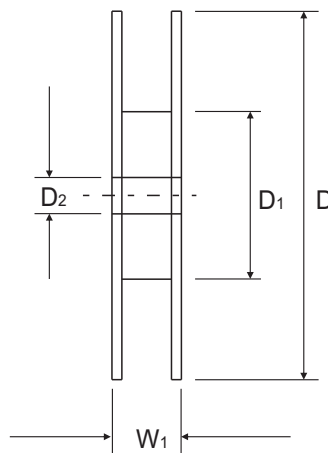
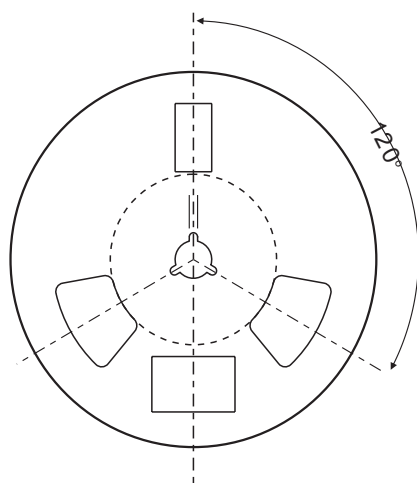
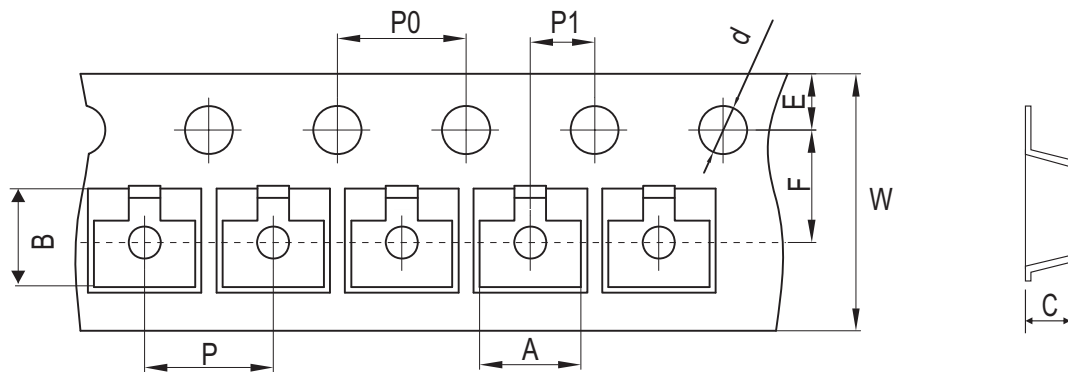
Fig.4 - Power Derating Curve



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

REV: A

## Reel Taping Specification



SOT-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.40 ± 0.10	2.40 ± 0.10	1.20 ± 0.10	1.50 ± 0.10	178.00 ± 1.00	54.40 ± 0.50	13.00 ± 0.50
	(inch)	0.094 ± 0.004	0.094 ± 0.004	0.047 ± 0.004	0.059 ± 0.004	7.087 ± 0.039	2.142 ± 0.020	0.512 ± 0.020

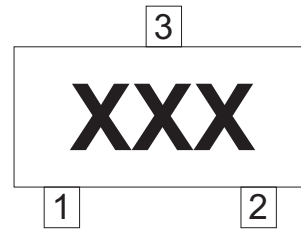
SOT-323	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 + 0.30 / - 0.10	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.315 + 0.012 / - 0.004	0.374 ± 0.039

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

REV: A

## Marking Code

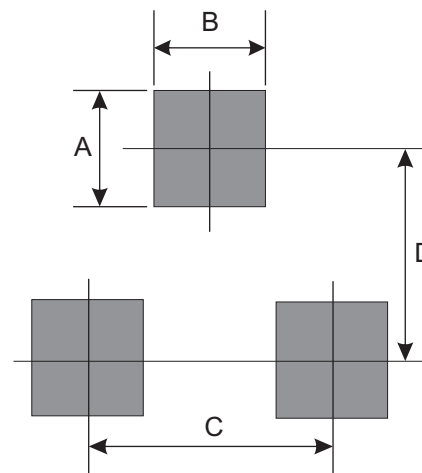
Part Number	Marking Code
ACDSV3-99-G	KJG



xxx = Product type marking code

## Suggested PAD Layout

SIZE	SOT-323	
	(mm)	(inch)
A	0.90	0.035
B	0.70	0.028
C	1.30	0.051
D	1.90	0.075



Note:  
1. The pad layout is for reference purposes only.

## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
SOT-323	3,000	7