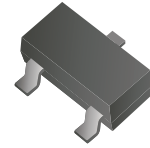


ACDSV3-99-HF

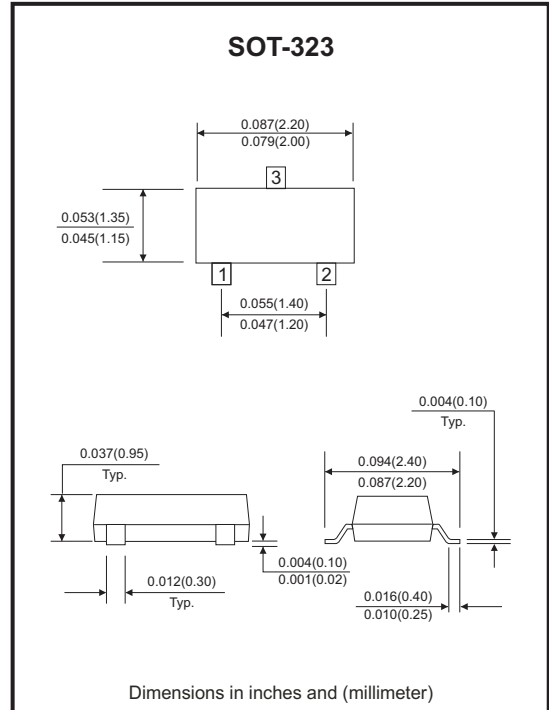
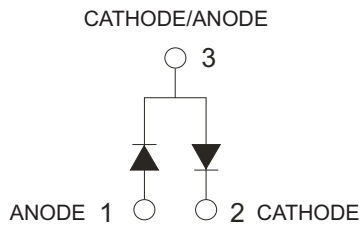
**RoHS Device
Halogen Free**



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}	@t=1.0s 2.0	A
		@t=1.0μs	
Average rectified output current	I_o	150	mA
Power dissipation	P_D	200	mW
Thermal resistance junction to ambient air	$R_{θJA}$	625	°C/W
Operating and storage temperature range	T_J, T_{STG}	-55 to +150	°C

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

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

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

RATING AND TYPICAL CHARACTERISTIC CURVES (ACDSV3-99-HF)

Fig.1 - Forward Characteristic

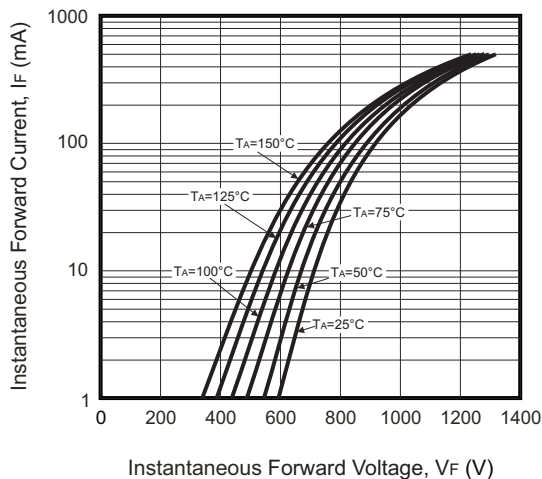


Fig.2 - Typical Reverse Characteristic

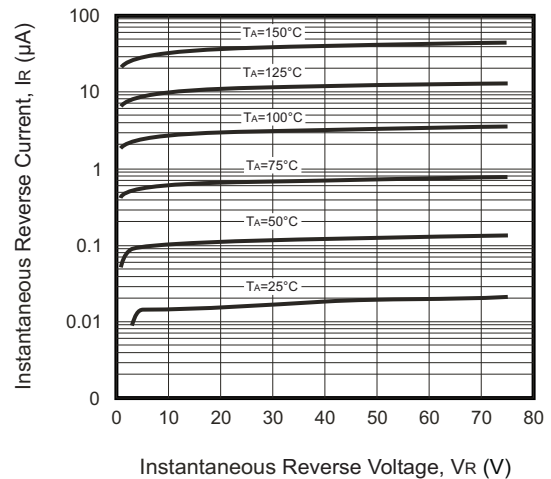


Fig.3 - Typical Capacitance vs. Reverse Voltage

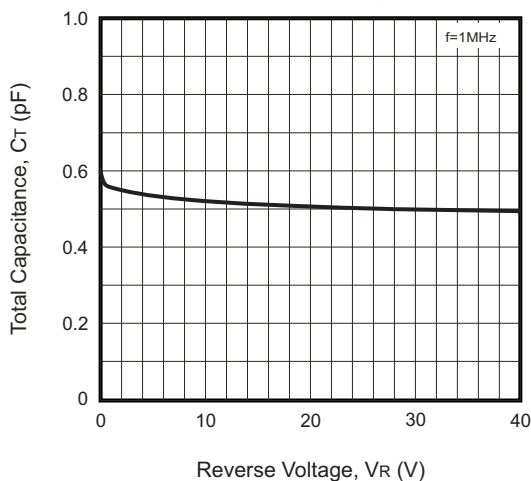
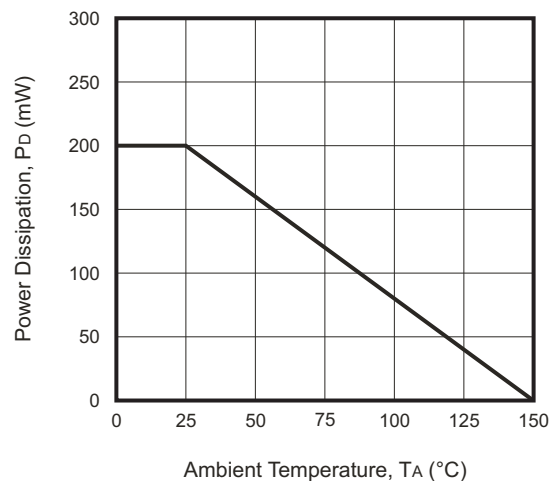


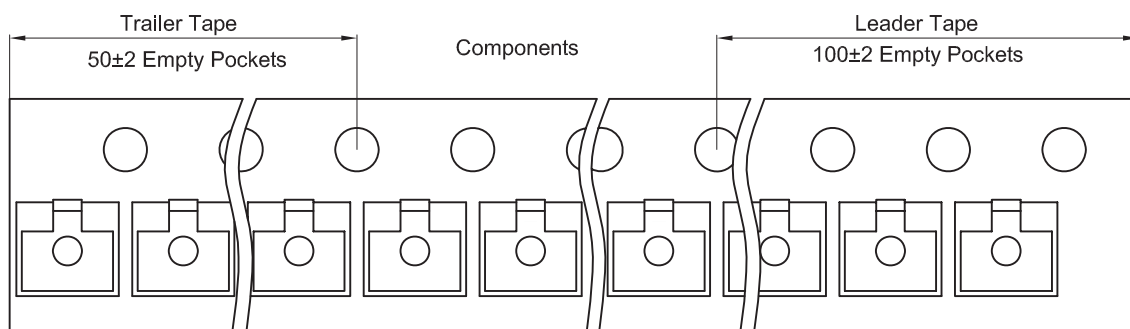
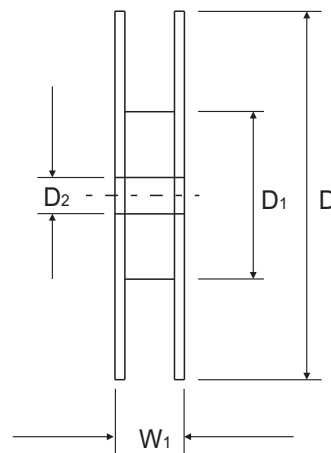
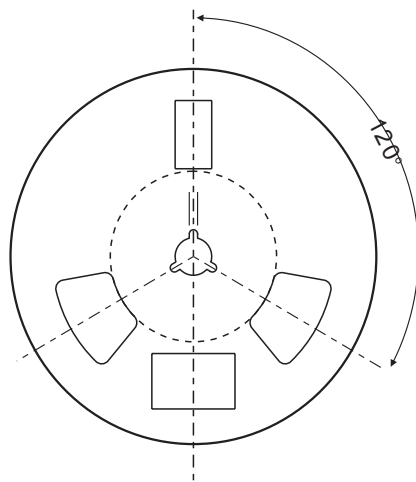
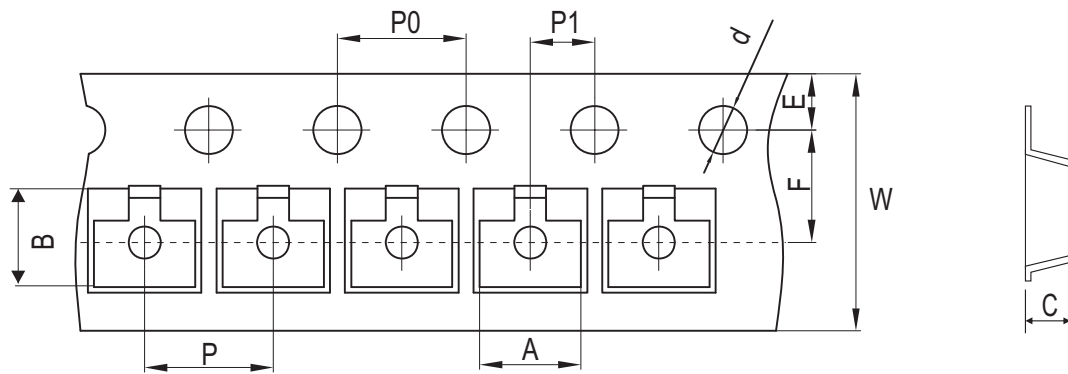
Fig.4 - Power Derating Curve



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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

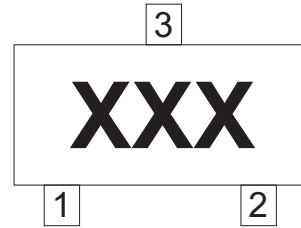
SOT-323	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 + 0.30 / - 0.10	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.315 + 0.012 / - 0.004	0.374 ± 0.039

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

REV: A

Marking Code

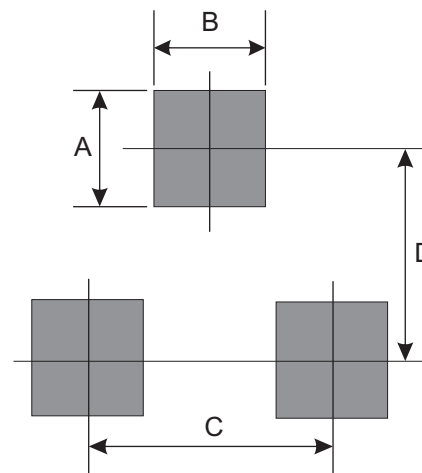
Part Number	Marking Code
ACDSV3-99-HF	KJG



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