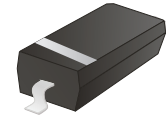


## ACZRW4689-G

Voltage: 5.1Volts

Power: 350mW

RoHS Device

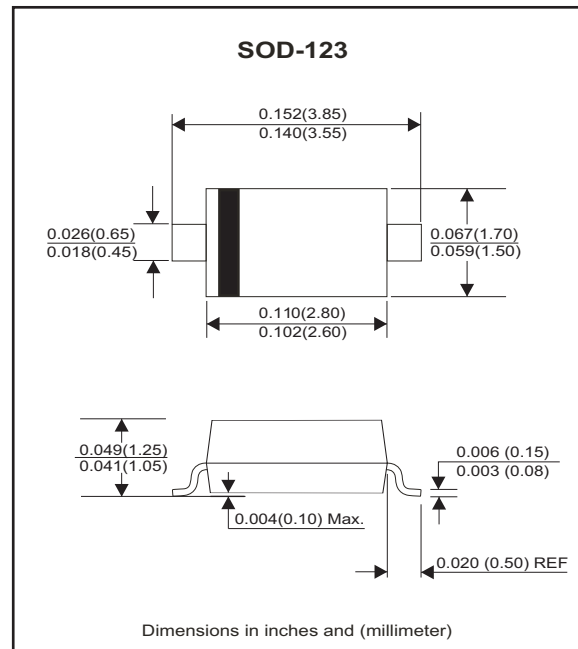


### Features

- For surface mounted applications.
- Wide zener reverse voltage range.
- Small package size for high density applications.
- ESD Rating of class 3(>16KV) per human body model.
- MAXIMUM Case temperature for soldering purposes: 260°C for 10 Seconds
- Comply with AEC-Q101

### Mechanical data

- Case: SOD-123 , Void-free, transfer-molded, thermosetting plastic case.
- Finish: Corrosion resistant finish, easily solderable.
- Terminals: Solder Plated,solderable per MIL-STD-750,method 2026.
- Polarity: Cathode band.
- Weight: 0.01 grams(approx.).



### Circuit diagram



### Maximum Rating (at $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum forward voltage @ $I_F=10\text{mA}$	$V_F$	0.9	V
Maximum power dissipation	$P_D$	350	mW
Thermal resistance, Junction to ambient air	$R_{\theta JA}$	357	$^\circ\text{C}/\text{W}$
Junction temperature range	$T_J$	-65 to +150	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-65 to +150	$^\circ\text{C}$

Notes: Device mounted on ceramic PCB; 5.0mm\*7.0mm with pad areas 35mm<sup>2</sup>.

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

Part Number	Zener Voltage (Note 1)			Leakage Current		Marking Code	
	$V_Z(\text{Volts})$			$@I_{ZT}$	$I_R@V_R$		
	Min	Nom	Max	$\mu\text{A}$	$\mu\text{A}$		Volts
ACZRW4689-G	4.85	5.1	5.36	50	10	3.0	CU

Notes: 1. Nominal Zener voltage is measured with the device junction in thermal equilibrium at  $T_L=30^\circ\text{C} \pm 1^\circ\text{C}$

## RATING AND CHARACTERISTIC CURVES (ACZRW4689-G)

Fig.1 - Forward Characteristics

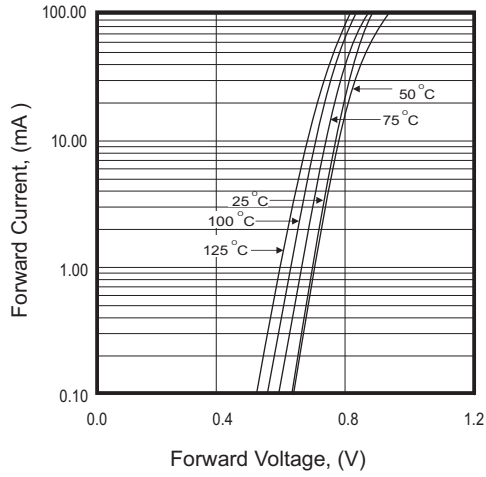


Fig.2 - Reverse Characteristic

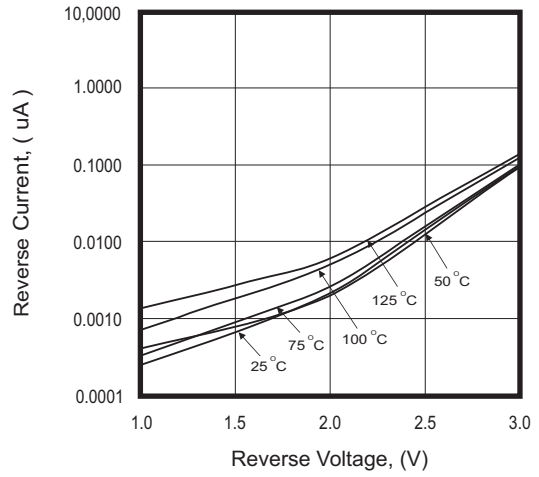


Fig.3 - Capacitance Between Terminals Characteristics

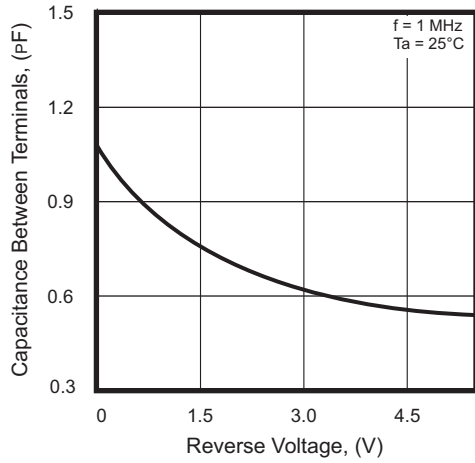
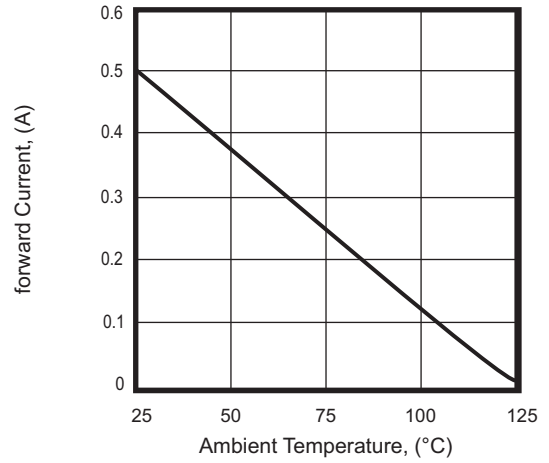
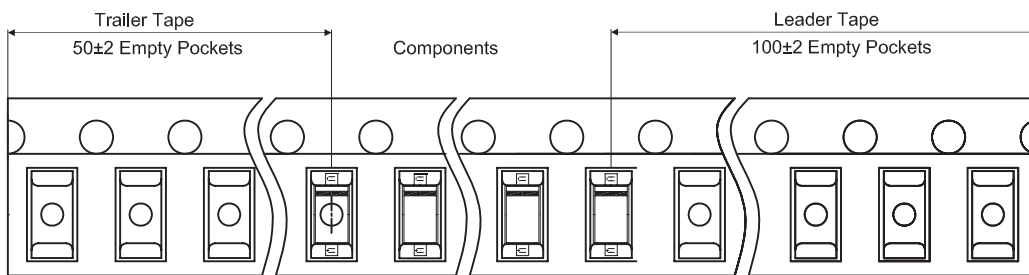
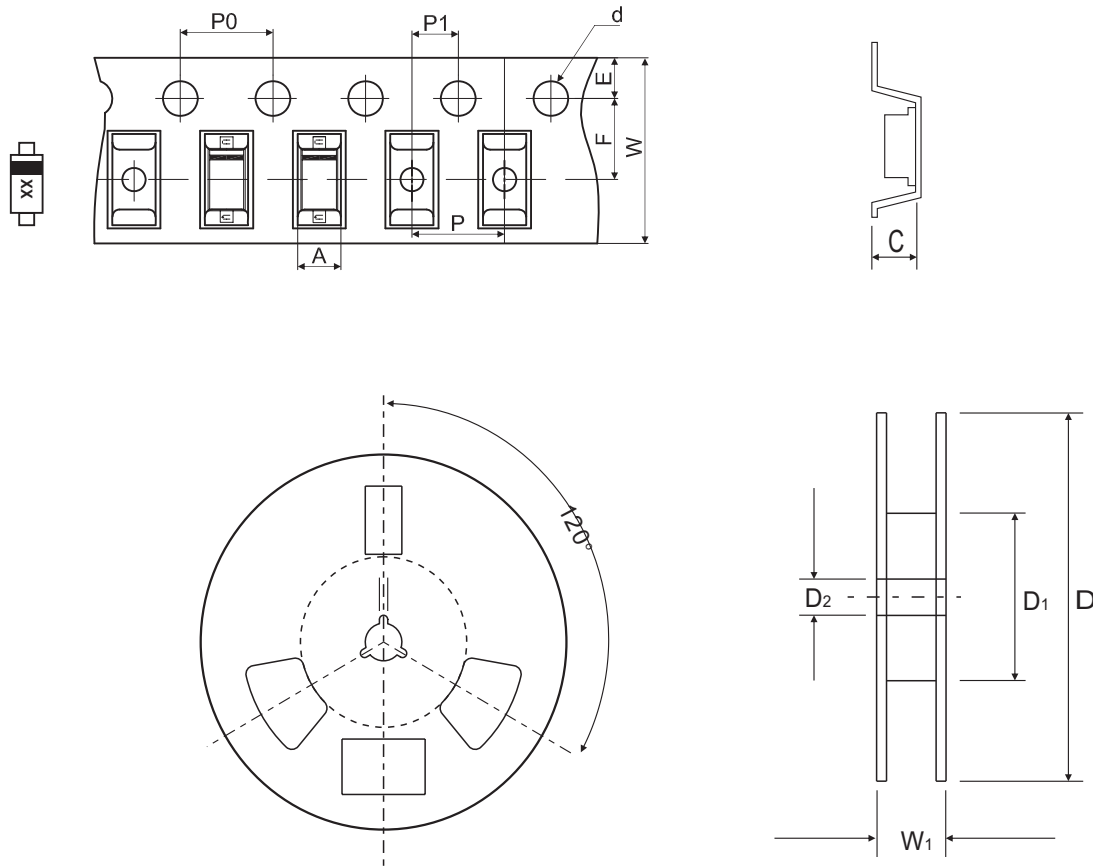


Fig.4 - Power Derating



## Reel Taping Specification



SOD-123	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	1.85 ± 0.05	3.94 ± 0.05	1.57 ± 0.05	1.55 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.073 ± 0.002	0.155 ± 0.002	0.062 ± 0.002	0.061 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOD-123	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	W	W <sub>1</sub>
	(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

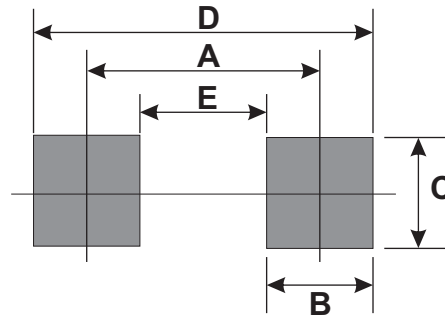
## Marking Code

Part Number	Marking Code
ACZRW4689-G	CU



## Suggested PAD Layout

SIZE	SOD-123	
	(mm)	(inch)
A	3.24	0.128
B	0.80	0.031
C	1.00	0.039
D	4.04	0.159
E	2.44	0.096



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
SOD-123	3,000	7