

## Small Signal Zener Diode

### Features and Benefits

- Silicon planar power zener diode
- Small power mold Type
- High reliability and very high stability
- “Green” device and RoHS compliant device



SOD-123



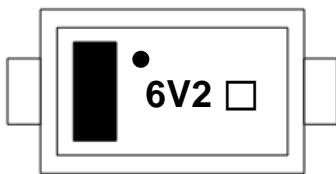
### Applications

- Constant voltage regulation
- Reference voltage application

### Ordering Information


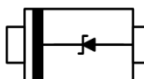
Part Number	Marking Code	Package	Packaging
SDZ6V2CG	● 6V2 □	SOD-123	Tape & Reel

### Marking Information



- = Clip Bonding Marking
- 6V2 = Specific Device Code
- = Year & Week Code Marking
- = Color Band Denote Cathode

### Pinning Information

Pin	Description	Simplified Outline	Graphic Symbol
1	Cathode		
2	Anode		

### Absolute Maximum Ratings (T<sub>amb</sub>=25°C, Unless otherwise specified)

Characteristic	Symbol	Ratings	Unit
Power dissipation <sup>1)</sup>	P <sub>D</sub>	1000	mW
Operating junction temperature	T <sub>J</sub>	150	°C
Storage temperature range	T <sub>stg</sub>	-55 to +150	

<sup>1)</sup> Device mounted on FR4 PCB, Single Side Copper, Mounting Pad for 2.5x2.5 mm.

## Electrical Characteristics (T<sub>amb</sub>=25°C, Unless otherwise specified)

Type No.	Zener Voltage V <sub>Z</sub> [V]				Reverse Current I <sub>R</sub> [μA]	
	Min.	Typ.	Max.	I <sub>Z</sub> [mA]	Max.	V <sub>R</sub> [V]
SDZ3V6CG	3.6	3.813	4.0	40	60	1.0
SDZ3V9CG	3.9	4.136	4.4	40	40	1.0
SDZ4V3CG	4.3	4.572	4.8	40	20	1.0
SDZ4V7CG	4.7	4.924	5.2	40	20	1.0
SDZ5V1CG	5.1	5.368	5.7	40	20	1.0
SDZ5V6CG	5.6	5.856	6.3	40	20	1.5
SDZ6V2CG	6.2	6.509	7.0	40	20	3.0
SDZ6V8CG	6.8	7.280	7.7	40	20	3.5
SDZ7V5CG	7.5	7.889	8.4	40	20	4.0
SDZ8V2CG	8.2	8.655	9.3	40	20	5.0
SDZ9V1CG	9.1	9.747	10.2	40	20	6.0
SDZ10VCG	10.0	10.310	11.2	40	10	7.0
SDZ11VCG	11.0	11.510	12.3	20	10	8.0
SDZ12VCG	12.0	12.500	13.5	20	10	9.0
SDZ13VCG	13.3	13.820	15.0	20	10	10.0
SDZ15VCG	14.7	15.350	16.5	20	10	11.0
SDZ16VCG	16.2	16.860	18.3	20	10	12.0
SDZ18VCG	18.0	19.000	20.3	20	10	13.0
SDZ20VCG	20.0	20.820	22.4	20	10	15.0
SDZ22VCG	22.0	23.850	24.5	10	10	17.0
SDZ24VCG	24.0	25.310	27.6	10	10	19.0
SDZ27VCG	27.0	28.700	30.8	10	10	21.0
SDZ30VCG	30.0	31.570	34.0	10	10	23.0
SDZ33VCG	33.0	34.950	37.0	10	10	25.0
SDZ36VCG	36.0	39.240	40.0	10	10	27.0

※ The Zener voltage (V<sub>Z</sub>) is measured 40ms after power is supplied.

## Rating and Characteristic Curves

Fig. 1) Typical Zener Characteristics

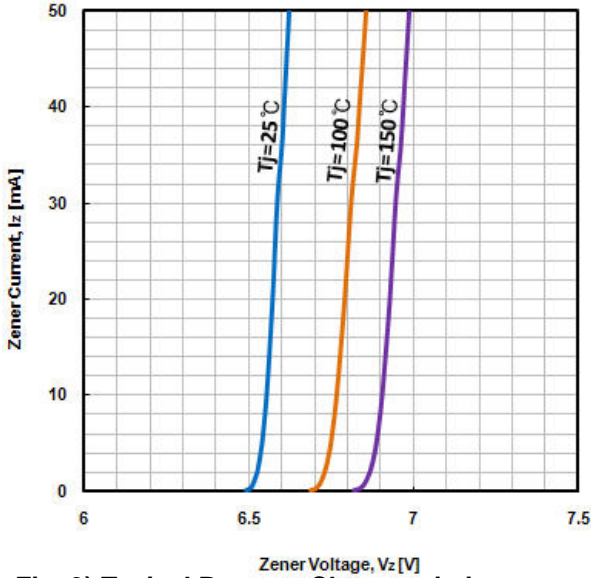


Fig. 2) Typical Forward Characteristics

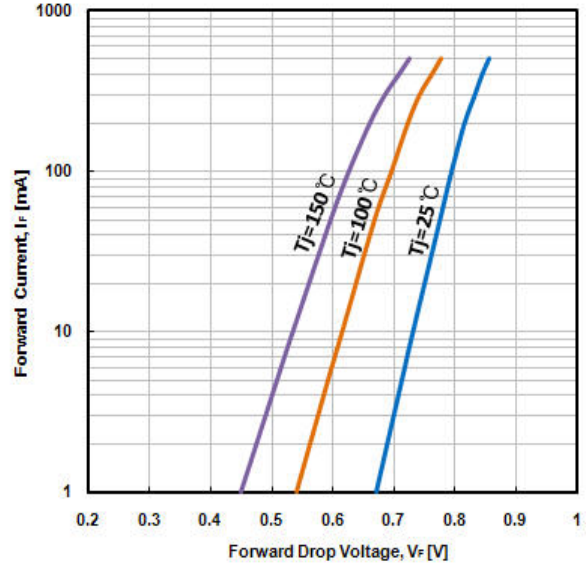


Fig. 3) Typical Reverse Characteristics

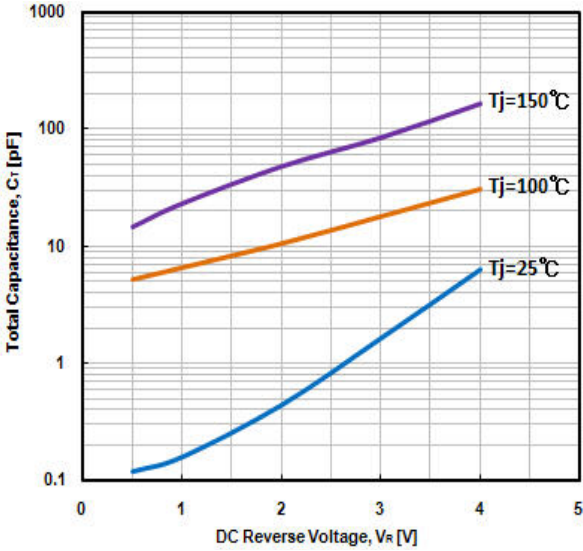


Fig. 4) Power Dissipation vs. Ambient Temperature

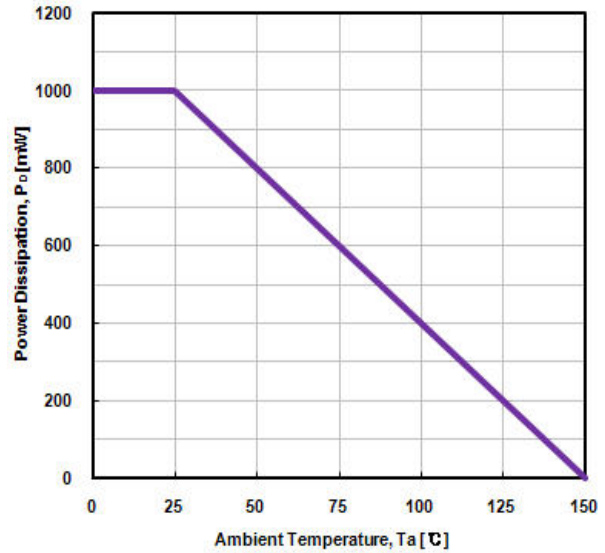
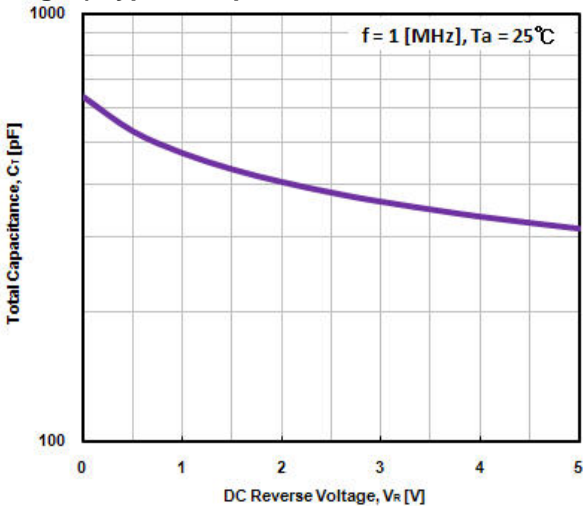
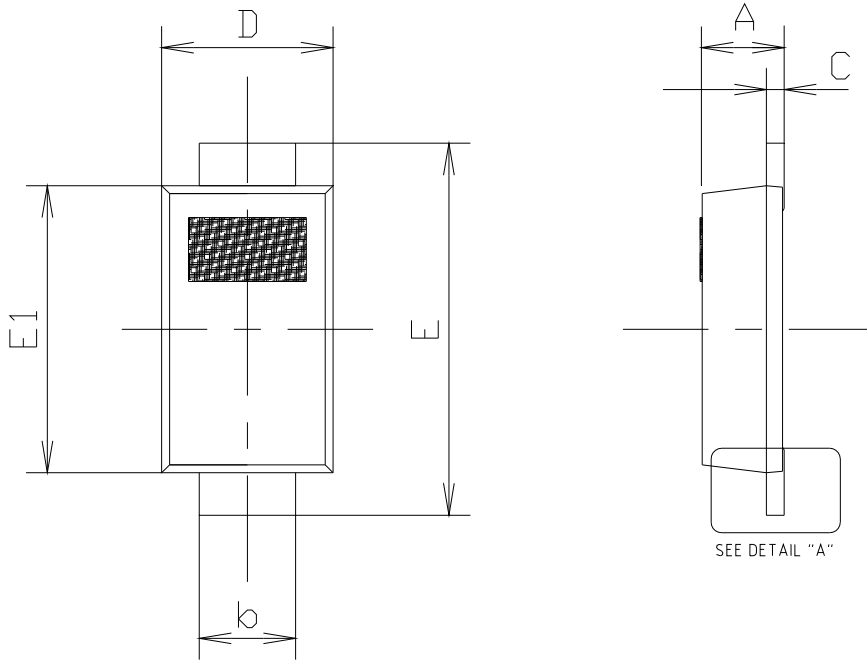


Fig. 5) Typical Capacitance Characteristics

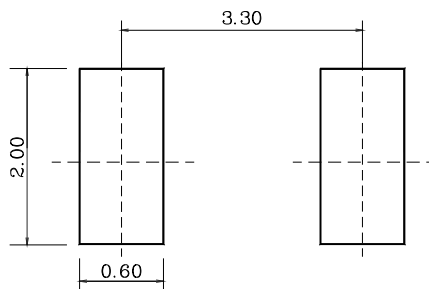


Package Outline Dimensions (Unit : mm)



SYMBOL	MILLIMETERS			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A	0.70	0.85	1.00	
b	0.50	0.75	1.00	
c	0.12	0.16	0.20	
D	1.50	1.60	1.70	
E	3.30	3.50	3.70	
E1	2.50	2.65	2.80	

※ Recommend PCB solder land (Unit : mm)



**The AUK Corp. products are intended for the use as components in general electronic equipment (Office and communication equipment, measuring equipment, home appliance, etc.).**

**Please make sure that you consult with us before you use these AUK Corp. products in equipments which require high quality and / or reliability, and in equipments which could have major impact to the welfare of human life(atomic energy control, airplane, spaceship, transportation, combustion control, all types of safety device, etc.). AUK Corp. cannot accept liability to any damage which may occur in case these AUK Corp. products were used in the mentioned equipments without prior consultation with AUK Corp..**

**Specifications mentioned in this publication are subject to change without notice.**