

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



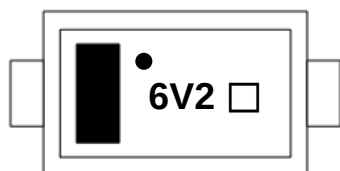
Applications

- Constant voltage regulation
- Reference voltage application

Ordering Information

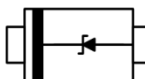
Part Number	Marking Code	Package	Packaging
SDZ6V2CG	● 6V2 □	SOD-123	Tape & Reel

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 ($T_{amb}=25^{\circ}\text{C}$, Unless otherwise specified)

Characteristic	Symbol	Ratings	Unit
Power dissipation ¹⁾	P_D	1000	mW
Operating junction temperature	T_J	150	$^{\circ}\text{C}$
Storage temperature range	T_{stg}	-55 to +150	

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

Electrical Characteristics ($T_{amb}=25^{\circ}\text{C}$, Unless otherwise specified)

Type No.	Zener Voltage V_Z [V]				Reverse Current I_R [μA]	
	Min.	Typ.	Max.	I_Z [mA]	Max.	V_R [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_Z) is measured 40ms after power is supplied.

Rating and Characteristic Curves

Fig. 1) Typical Zener Characteristics

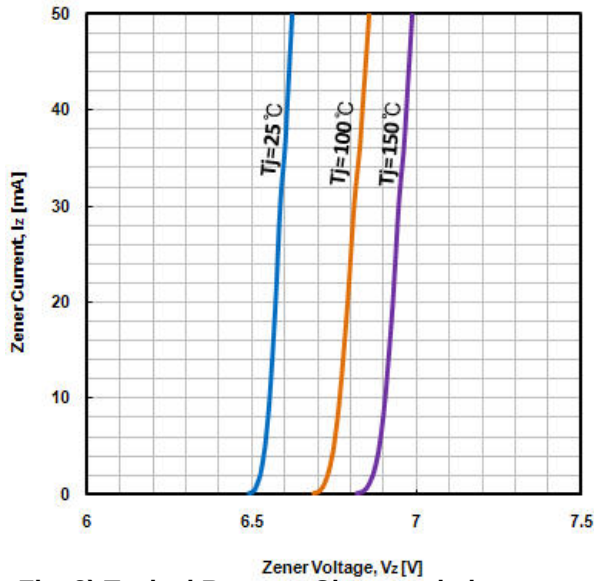


Fig. 2) Typical Forward Characteristics

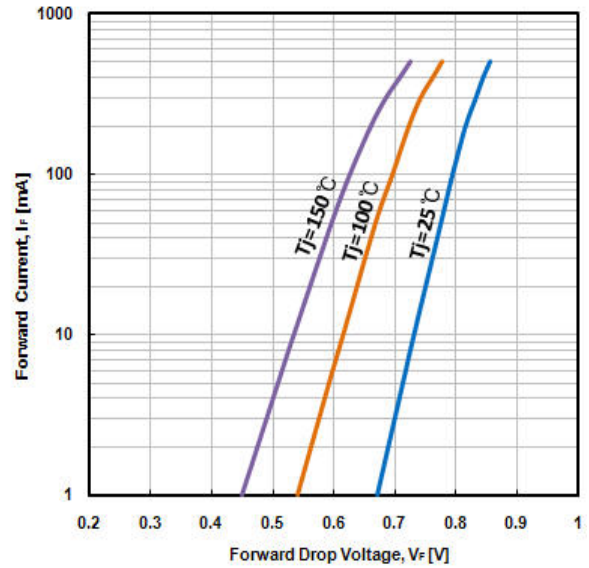


Fig. 3) Typical Reverse Characteristics

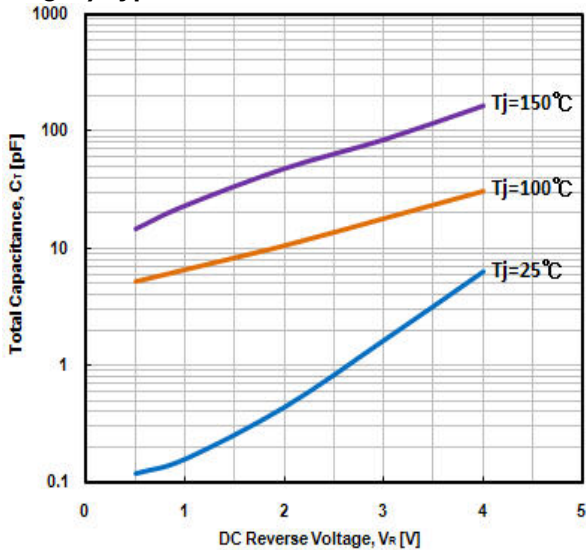


Fig. 4) Power Dissipation vs. Ambient Temperature

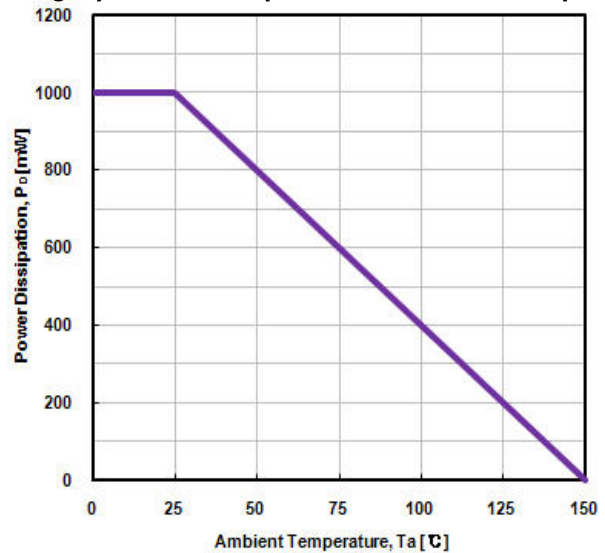
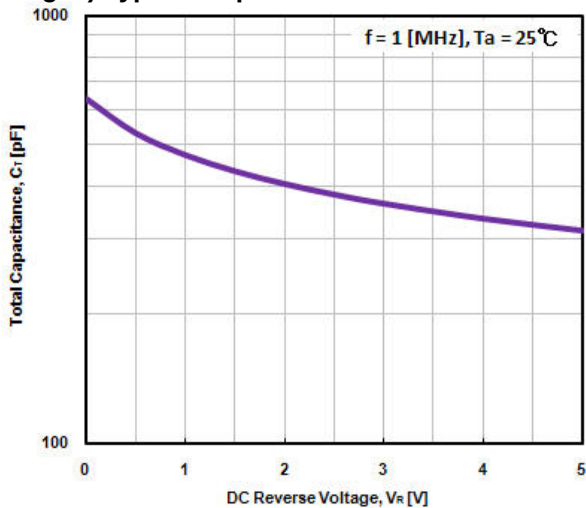
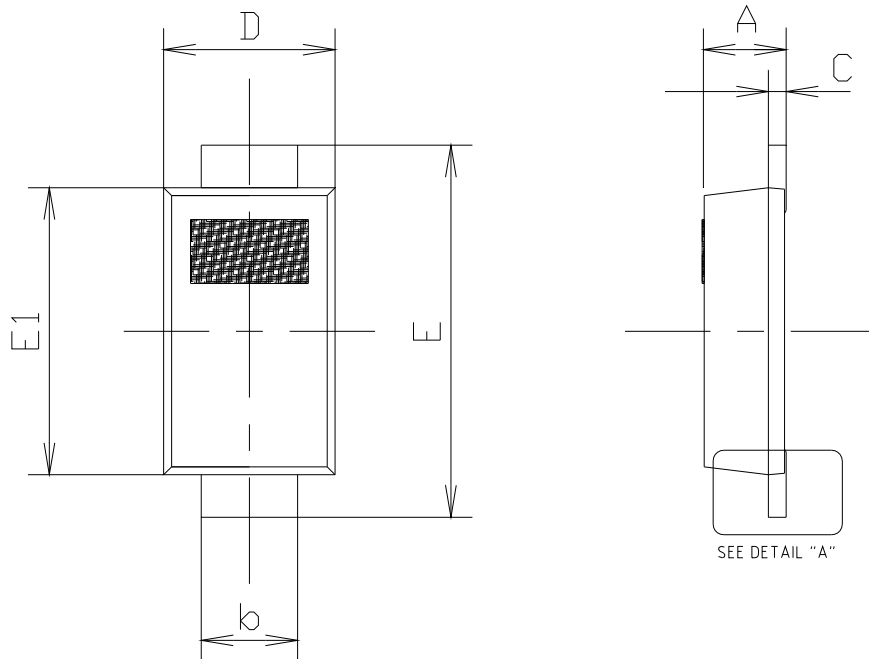


Fig. 5) Typical Capacitance Characteristics

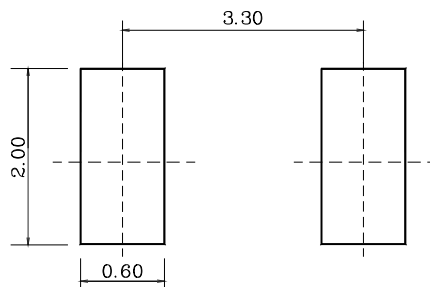


Package Outline Dimensions (Unit : mm)



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)



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