KODENSHI AUK

SDZ3V0G

ZENER DIODE

Small Signal Zener Diode

Features and Benefits

- Silicon planar power Zener diode
- Low Zener impedance and low leakage current
- High reliability and very high stability
- “Green” device and RoHS compliant device

SOD-123

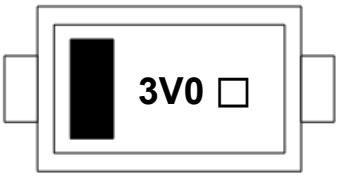
Applications

- Constant voltage regulation
- Reference voltage application

Ordering Information

Part Number	Marking Code	Package	Packaging
SDZ3V0G	3V0 □	SOD-123	Tape & Reel

Marking Information

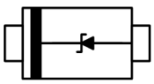


3V0 = Specific Device Code

□ = 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℃, Unless otherwise specified)

Characteristic	Symbol	Ratings	Unit
Power dissipation [1)]	P_D	500	mW
Operating junction temperature	T_J	150	°C
Storage temperature range	T_{stg}	-55℃ to +150°C	°C

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

Electrical Characteristics (T_{amb}=25℃, Unless otherwise specified)

Device	Marking Info.	V_Z			Z_{ZT}		Z_{ZK}		I_R	
		@ I_{ZT}	Min	Max	Max	@ I_{ZT}	Max	@ I_{ZK}	Max	@ V_R
		mA	V		Ω	mA	Ω	mA	μA	V
SDZ3V0G	3V0	20	2.85	3.15	29	20	1600	0.25	50	1.0
SDZ3V3G	3V3	20	3.14	3.50	28	20	1600	1.0	25	1.0
SDZ3V6G	3V6	20	3.42	3.78	24	20	1700	0.25	15	1.0
SDZ3V9G	3V9	20	3.71	4.10	23	20	1900	0.25	5	1.0
SDZ5V1G	5V1	20	4.94	5.20	17	20	1600	0.25	5	1.5
SDZ5V6G	5V6	20	5.45	5.73	40	20	500	1.0	5	2.5
SDZ6V2G	6V2	20	6.08	6.35	7	20	1600	0.25	5	4.0
SDZ6V8G	6V8	20	6.66	7.01	15	20	75	1.0	1.8	4.0
SDZ7V5G	7V5	20	7.29	7.67	6	20	500	0.25	3	6.0
SDZ8V2G	8V2	20	8.04	8.40	15	20	120	1.0	0.7	5.0
SDZ9V1G	9V1	20	8.85	9.28	10	20	600	0.25	3	7.0
SDZ12VG	12V	10	11.44	12.24	25	10	150	1.0	0.2	9.0
SDZ13VG	13V	10	12.70	13.30	30	10	160	1.0	0.2	10.0
SDZ15VG	15V	8.5	14.25	15.75	16	8.5	600	0.25	0.1	11.0
SDZ16VG	16V	10	15.64	16.38	40	10	188	1.0	0.2	12.0
SDZ18VG	18V	7.0	16.80	19.10	21	7.0	600	0.25	0.1	14.0
SDZ20VG	20V	6.2	19.00	21.00	25	6.2	600	0.25	0.1	15.0
SDZ24VG	24V	5.2	22.80	25.20	33	5.2	600	0.25	0.1	18.0
SDZ28VG	28V	4.5	26.60	29.40	44	4.5	600	0.25	0.1	21.0
SDZ30VG	30V	4.2	28.50	31.50	49	4.2	600	0.25	0.1	23.0
SDZ33VG	33V	3.8	31.35	34.65	58	3.8	700	0.25	0.1	25.0
SDZ36VG	36V	3.4	34.2	37.8	70	3.4	700	0.25	0.1	27.0

Rating and Characteristic Curves

Fig. 1) Typical Zener Characteristics

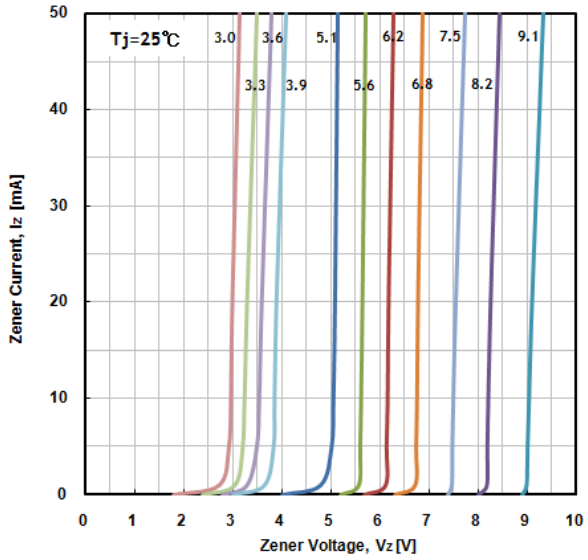


Fig. 2) Typical Zener Characteristics

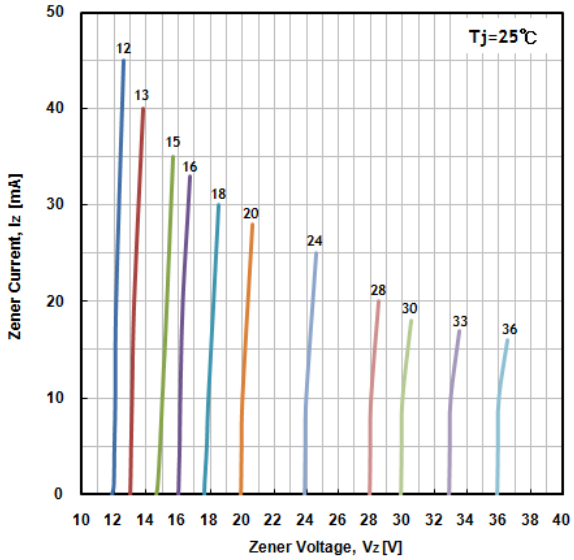


Fig. 3) Typical Forward Characteristics

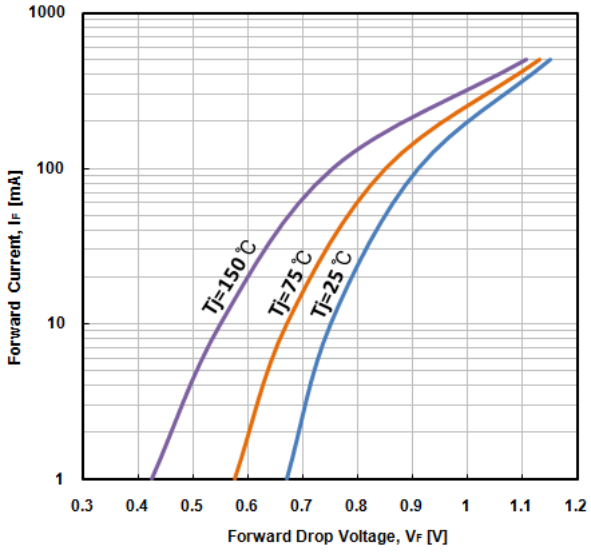


Fig. 4) Power Dissipation vs. Ambient Temperature

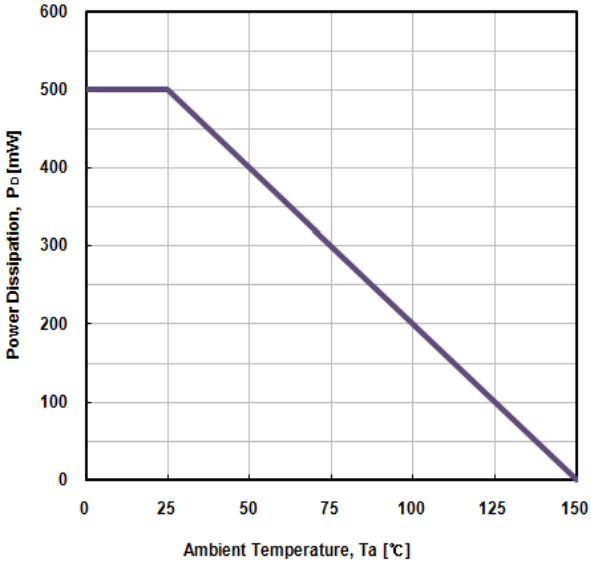
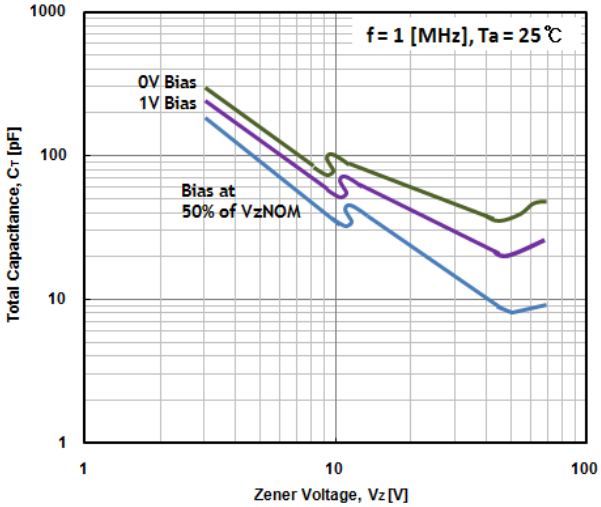
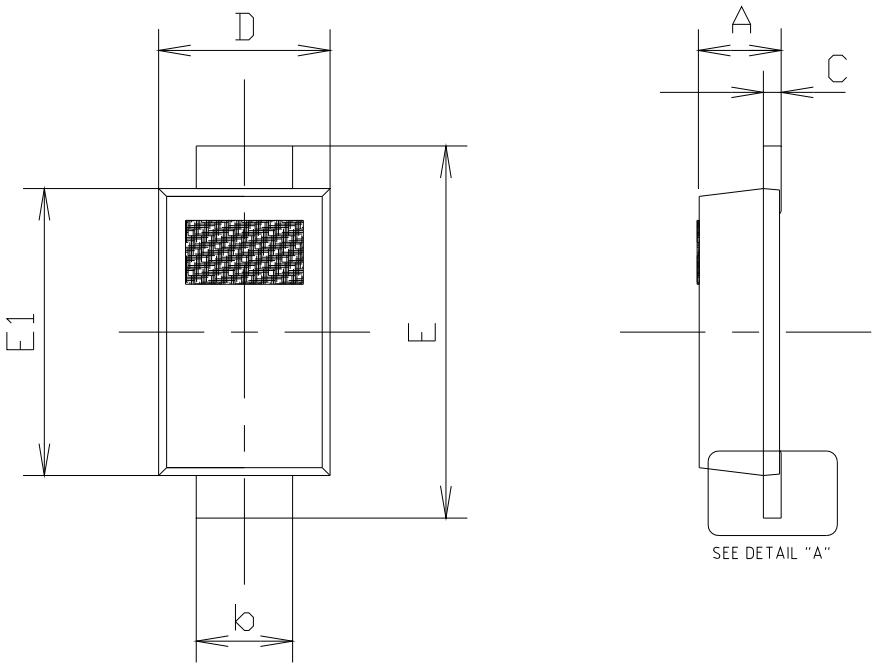


Fig. 5) Typical Capacitance Characteristics

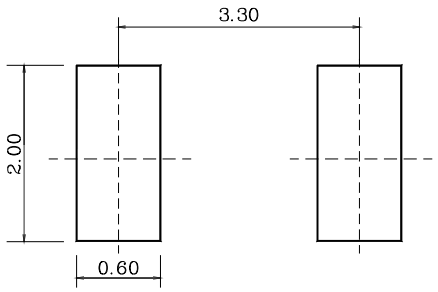


Package Outline Dimensions



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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