



350mW Power Dissipation Electronics Component BZT52C27 Diode Zener 27V

Basic Information

- Place of Origin: Shenzhen, Guangdong, China
- Brand Name: SOCAY
- Certification: REACH, RoHS, ISO
- Model Number: BZT52C27



Product Specification

- Product Name: Zener Diode
- Zener Diode Package Type: SOD-123
- Zener Diode Power Dissipation: 350mW
- Zener Voltage (Nom.): 27V
- Zener Voltage (Min.): 25.65V
- Zener Voltage (Max.): 28.35V
- ZZK: 300Ω
- IZK: 0.5mA
- Highlight: Electronics Component 27V, Electronics Component 350mW, Diode Zener 27V Component



Product Description

SOCAY 27V 350mW BZT52C27 SOD-123 Package SMD Zener Diode

Zener Diode DATASHEET: [BZT52C2V4_BZT52C75\(SOD-123\)_v2204.1.pdf](#)

Zener Diode Features:

Planar Die construction
350mW Power Dissipation
Zener Voltages from 2.4~75V
Ideally Suited for Automated Assembly Processes
Lead free in compliance with EU RoHS 2.0
Green molding compound as per IEC 61249 standard

Zener Diode Mechanical Data:

Case: SOD-123, Molded Plastic
Terminals: Solderable per MIL-STD-750, Method 2026
Polarity: See Diagram Below
Approx. Weight: 0.0004 ounces, 0.01 grams

Zener Diode Maximum Ratings ($T_A=25$ unless otherwise specified):

Zener Diode Parameter	Symbol	Value	Units
Zener Diode Power Dissipation (Note 1)	PD	350	mW
Thermal Resistance from Junction to Ambient	R θ JA	357	/W
Zener Diode Junction Temperature	TJ	150	
Zener Diode Storage Temperature	TSTG	-55 to +150	
Note1: Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm ²			

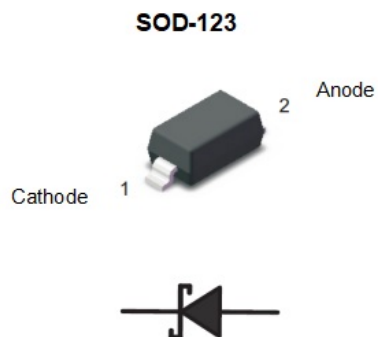
Zener Diode Electrical Characteristics ($T_A=25$):

Part Number	Zener Voltage Range (Note 2)			Maximum Zener Impedance (Note 3)				Maximum Leakage Current (Note 2)	
	VZ @ IZT			ZZT @ IZT		ZZK @ IZK		IR @ VR	
	Nom.(V)	Min.(V)	Max.(V)	(Ω)	(mA)	(Ω)	(mA)	(μ A)	(V)
BZT52C2V4	2.4	2.20	2.60	100	5.0	600	1.00	50	1.0
BZT52C2V7	2.7	2.50	2.90	100	5.0	600	1.00	20	1.0
BZT52C3V0	3.0	2.80	3.20	95	5.0	600	1.00	10	1.0
BZT52C3V3	3.3	3.10	3.50	95	5.0	600	1.00	5	1.0
BZT52C3V6	3.6	3.40	3.80	90	5.0	600	1.00	5	1.0
BZT52C3V9	3.9	3.70	4.10	90	5.0	600	1.00	3	1.0
BZT52C4V3	4.3	4.00	4.60	90	5.0	600	1.00	3	1.0
BZT52C4V7	4.7	4.40	5.00	80	5.0	500	1.00	3	2.0
BZT52C5V1	5.1	4.80	5.40	60	5.0	480	1.00	2	2.0
BZT52C5V6	5.6	5.20	6.00	40	5.0	400	1.00	1	2.0
BZT52C6V2	6.2	5.80	6.60	10	5.0	150	1.00	3	4.0
BZT52C6V8	6.8	6.40	7.20	15	5.0	80	1.00	2	4.0
BZT52C7V5	7.5	7.00	7.90	15	5.0	80	1.00	1	5.0
BZT52C8V2	8.2	7.70	8.70	15	5.0	80	1.00	0.7	5.0
BZT52C9V1	9.1	8.60	9.60	15	5.0	100	1.00	0.5	6.0
BZT52C10	10	9.40	10.60	20	5.0	150	1.00	0.2	7.0
BZT52C11	11	10.40	11.60	20	5.0	150	1.00	0.1	8.0
BZT52C12	12	11.40	12.70	25	5.0	150	1.00	0.1	8.0
BZT52C13	13	12.40	14.10	30	5.0	170	1.00	0.1	8.0
BZT52C15	15	13.80	15.60	30	5.0	200	1.00	0.1	10.5
BZT52C16	16	15.30	17.10	40	5.0	200	1.00	0.1	11.2
BZT52C18	18	16.80	19.10	45	5.0	225	1.00	0.1	12.6
BZT52C20	20	18.80	21.20	55	5.0	225	1.00	0.1	14.0
BZT52C22	22	20.80	23.30	55	5.0	250	1.00	0.1	15.4
BZT52C24	24	22.80	25.60	70	5.0	250	1.00	0.1	16.8
BZT52C27	27	25.10	28.90	80	2.0	300	0.50	0.1	18.9
BZT52C30	30	28.00	32.00	80	2.0	300	0.50	0.1	21.0
BZT52C33	33	31.00	35.00	80	2.0	325	0.50	0.1	23.1

BZT52C36	36	34.00	38.00	90	2.0	350	0.50	0.1	25.2
BZT52C39	39	37.00	41.00	130	2.0	350	0.50	0.1	27.3
BZT52C43	43	40.00	46.00	100	5.0	700	1.00	0.1	32.0
BZT52C47	47	44.00	50.00	100	2.0	750	1.00	0.1	35.0
BZT52C51	51	48.00	54.00	100	2.0	750	1.00	0.1	38.0
BZT52C56	56	53.20	58.80	200	2.0	400	0.50	0.1	39.2
BZT52C62	62	58.90	65.10	215	2.0	423	0.50	0.1	43.4
BZT52C68	68	64.60	71.40	240	2.0	447	0.50	0.1	47.6
BZT52C75	75	71.25	78.75	255	2.0	470	0.50	0.1	52.5

Note 2: Short duration test pulse used to minimize self-heating effect.
Note 3: f=1kHz.

SOD-123 Package Zener Diode Circuit Diagram:



Zener Diode Rating and Characteristic Curves: Fig1. Power Derating Curve

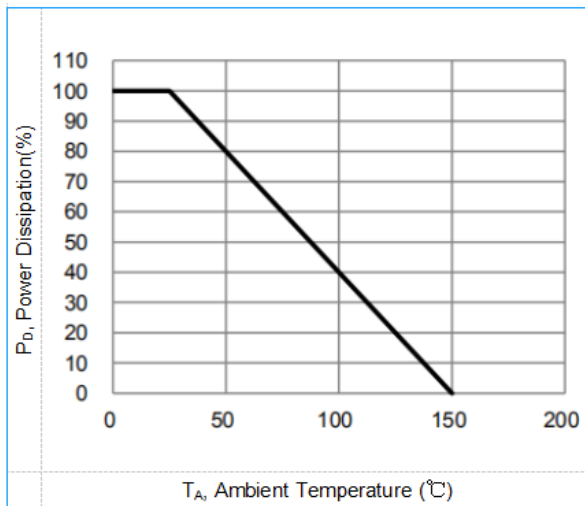


Fig2. Typical Junction Capacitance

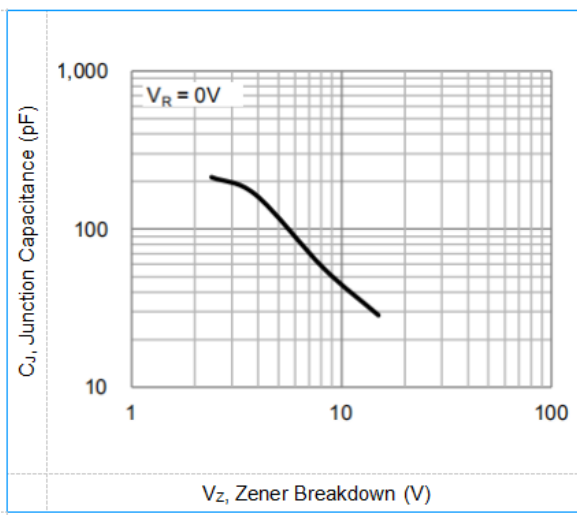


Fig3. Typical Zener Breakdown

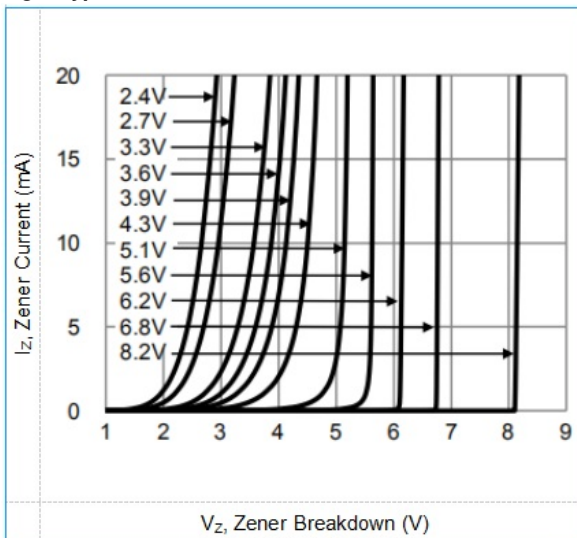


Fig4. Typical Zener Breakdown

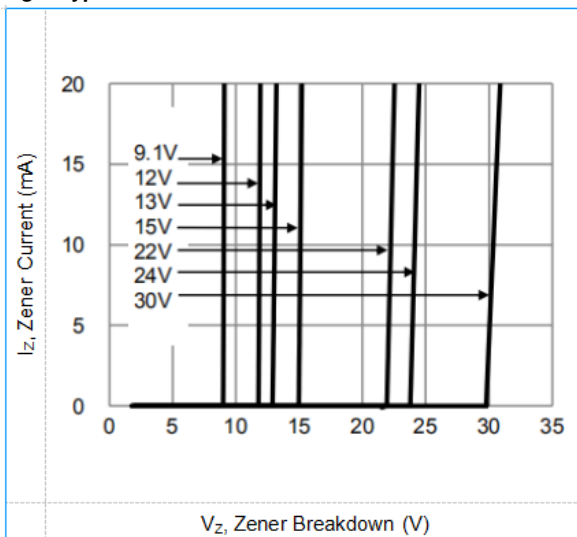
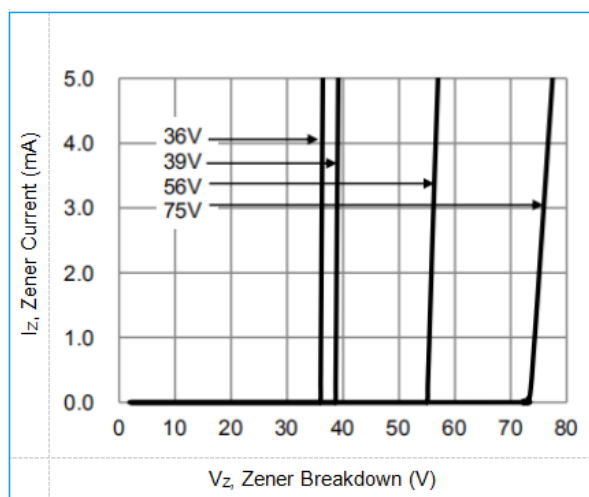
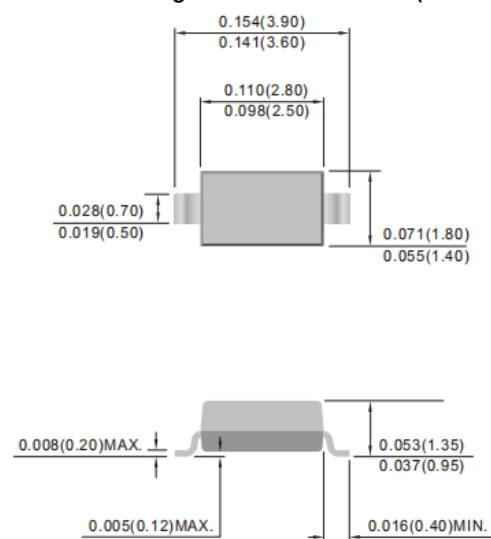


Fig5. Typical Zener Breakdown



SOD-123 Package Zener Diode Outline (Dimensions in inches and (millimeters)):



SOD-123 Package Zener Diode Ordering Information:

Zener Diode Part Number	Component Package	Quantity	Packaging Option
BZT52C2V4~BZT52C75	SOD-123	10000 PCS	per 13" plastic Reel
BZT52C2V4~BZT52C75	SOD-123	3000 PCS	per 7" plastic Reel

