



Planar Die Construction Zener Diode BZT52C8V2 SOD-123 Package SMD Diode

Our Product Introduction

Basic Information

- Place of Origin: Shenzhen, Guangdong, China
- Brand Name: SOCAY
- Certification: REACH, RoHS, ISO
- Model Number: BZT52C8V2
- Minimum Order Quantity: 3000PCS



Product Specification

- BZT52C8V2 Name: Zener Diode
- BZT52C8V2 Package Type: SOD-123
- BZT52C8V2 Power Dissipation: 350mW
- BZT52C8V2 Voltage (Nom.): 8.2V
- BZT52C8V2 Voltage (Min.): 7.79V
- BZT52C8V2 Voltage (Max.): 8.61V
- BZT52C8V2 ZZK: 80Ω
- BZT52C8V2 IZK: 1mA
- Highlight: SMD Zener Diode, Planar Die Zener Diode, BZT52C8V2

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Product Description

Planar Die Construction Zener Diode BZT52C8V2 SOD-123 Package SMD Diode

Zener Diode BZT52C8V2 DATASHEET: [BZT52C2V4_BZT52C75\(SOD-123\)_v2204.1.pdf](#)

Zener Diode BZT52C8V2 Distinguishing Feature:

It is a Planar Die construction
 Power Dissipation is 350mW
 Its Zener Voltage: 8.2V
 BZT52C8V2 is 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 BZT52C8V2 Mechanical Data:

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

Zener Diode BZT52C8V2 Maximum Ratings ($T_A=25$):

Diode Parameter	Symbol	Value	Units
Diode Power Dissipation (Note 1)	PD	350	mW
Thermal Resistance from Junction to Ambient	R θ JA	357	/W
Diode Junction Temperature	TJ	150	
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 BZT52C8V2 Electrical Features ($T_A=25$):

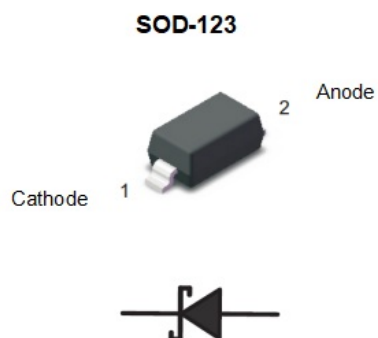
Part Number	Zener Diode Zener Voltage Range (Note 2)			Zener Diode Maximum Zener Impedance (Note 3)				Zener Diode Maximum Leakage Current (Note 2)	
Zener Diode	VZ @ IZT			ZZT @ IZT		ZZK @ IZK		IR @ VR	
	Nom.(V)	Min.(V)	Max.(V)	(Ω)	(mA)	(Ω)	(mA)	(μ A)	(V)
BZT52C2V4	2.4	2.20	2.60	100	5.0	600	1.00	50	1.0
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 Zener Diode BZT52C8V2 Circuit Diagram:



Zener Diode BZT52C8V2 Rating and Characteristic Curves:

Fig1. Zener Diode BZT52C8V2 Power Derating Curve

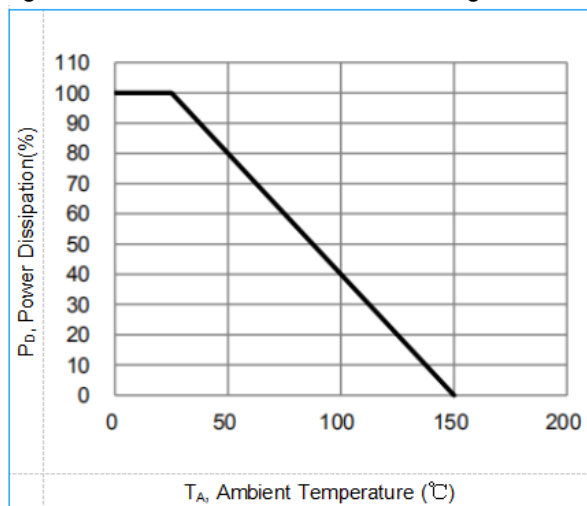


Fig2. Zener Diode BZT52C8V2 Typical Junction Capacitance

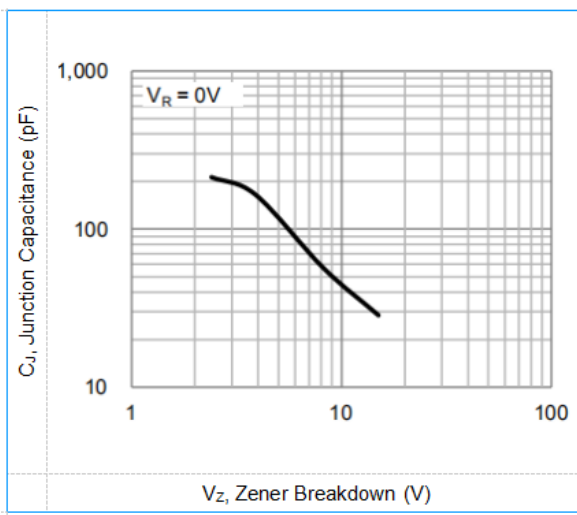


Fig3. Zener Diode BZT52C8V2 Typical Zener Breakdown

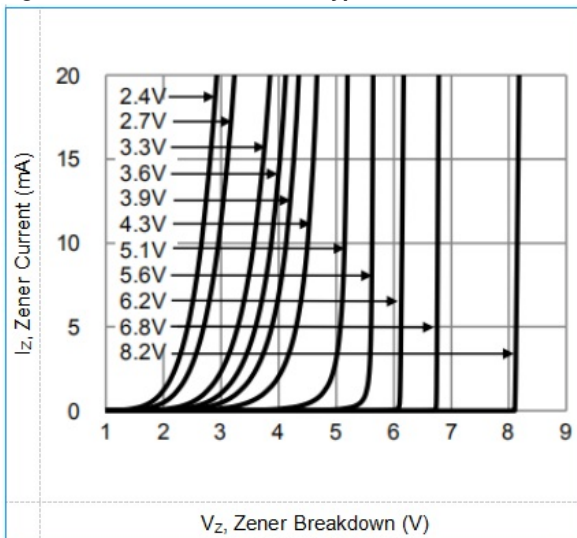


Fig4. Zener Diode BZT52C8V2 Typical Zener Breakdown

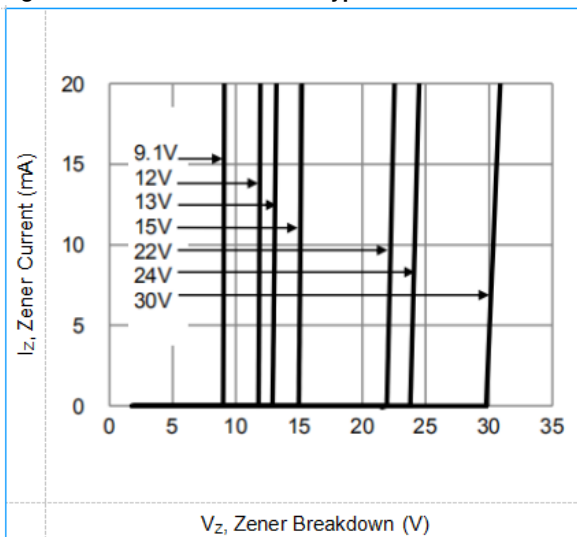
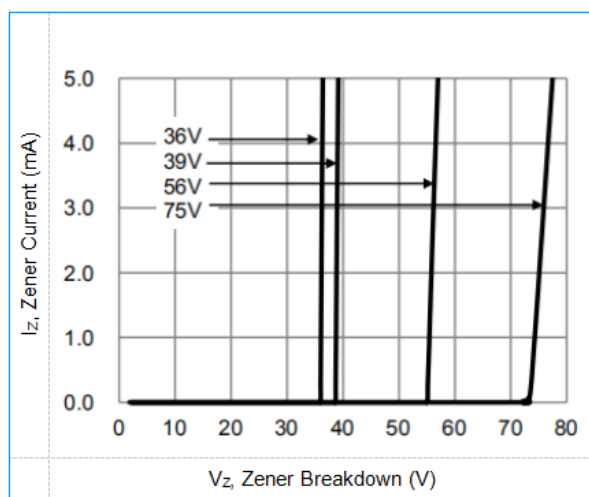
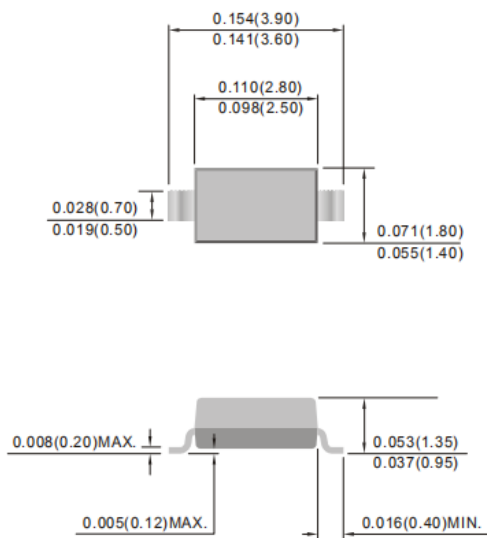


Fig5. Zener Diode BZT52C8V2 Typical Zener Breakdown



SOD-123 Zener Diode BZT52C8V2 Outline (inches(millimeters)):



SOD-123 Zener Diode BZT52C8V2 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

