



## PZD22B2V4C ~ PZD22B75C Series

### SILICON ZENER DIODE

**Voltage** 2.4~75 V **Power** 200 mW

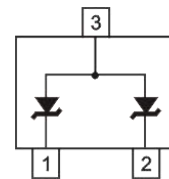
#### Features

- Planar Die construction
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

#### Mechanical Data

- Case: SOT-323 Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0002 ounces, 0.005 grams

SOT-323



### Maximum Ratings and Thermal Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Peak Pulse Power Dissipation at $T_A = 25^\circ\text{C}$	$P_D^{(1)}$	200	mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}^{(2)}$	540	$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	$T_J$	-55~150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55~150	$^\circ\text{C}$



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**Electrical Characteristics** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Part Number	Nominal Zener Voltage				Nominal Zener Impedance				Max. Reverse Leakage Current		Marking Code
	$V_Z@I_{ZT}$				$Z_{ZT}@I_{ZT}$		$Z_{ZK}@I_{ZK}$		$I_R@V_R$		
	Nom. V	Min. V	Max. V	mA	$\Omega$	mA	$\Omega$	mA	$\mu\text{A}$	V	
PZD22B2V4C	2.4	2.28	2.52	5	100	5	600	1	50	1	AFH
PZD22B2V7C	2.7	2.57	2.84	5	100	5	600	1	20	1	BFH
PZD22B3V0C	3	2.85	3.15	5	95	5	600	1	10	1	CFH
PZD22B3V3C	3.3	3.13	3.47	5	95	5	600	1	5	1	DFH
PZD22B3V6C	3.6	3.42	3.78	5	90	5	600	1	5	1	EFH
PZD22B3V9C	3.9	3.70	4.1	5	90	5	600	1	3	1	FFH
PZD22B4V3C	4.3	4.08	4.52	5	88	5	600	1	3	1	HFH
PZD22B4V7C	4.7	4.46	4.94	5	70	5	500	1	3	2	IFH
PZD22B5V1C	5.1	4.84	5.36	5	50	5	480	1	2	2	JFH
PZD22B5V6C	5.6	5.32	5.88	5	25	5	400	1	1	2	KFH
PZD22B6V2C	6.2	5.89	6.51	5	10	5	150	1	3	4	LFH
PZD22B6V8C	6.8	6.46	7.14	5	8	5	80	1	2	4	MFH
PZD22B7V5C	7.5	7.12	7.88	5	7	5	80	1	0.1	5	NFH
PZD22B8V2C	8.2	7.79	8.61	5	7	5	80	1	0.1	6	PFH
PZD22B8V7C	8.7	8.26	9.14	5	9	5	100	1	0.1	6.5	RFH
PZD22B9V1C	9.1	8.64	9.56	5	10	5	100	1	0.1	7	SFH
PZD22B10C	10	9.5	10.5	5	15	5	150	1	0.1	7.5	TFH
PZD22B11C	11	10.45	11.55	5	18	5	150	1	0.1	8.5	UFH
PZD22B12C	12	11.4	12.6	5	22	5	150	1	0.1	9	VFH
PZD22B13C	13	12.35	13.65	5	25	5	170	1	0.1	10	WFH
PZD22B14C	14	13.3	14.7	5	28	5	170	1	0.1	10.5	XFH
PZD22B15C	15	14.25	15.75	5	32	5	200	1	0.1	11	YFH
PZD22B16C	16	15.2	16.8	5	36	5	200	1	0.1	12	ZFH
PZD22B17C	17	16.15	17.85	5	39	5	200	1	0.1	13	2FH
PZD22B18C	18	17.1	18.9	5	42	5	225	1	0.1	14	3FH
PZD22B20C	20	19	21	5	48	5	225	1	0.1	15	4FH
PZD22B22C	22	20.9	23.1	5	55	5	250	1	0.1	17	6FH
PZD22B24C	24	22.8	25.2	5	62	5	250	1	0.1	18	7FH
PZD22B27C	27	25.65	28.35	5	70	5	300	1	0.1	20	9FH
PZD22B28C	28	26.6	29.4	5	74	5	300	1	0.1	22	AHH



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### Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Part Number	Nominal Zener Voltage				Nominal Zener Impedance				Max. Reverse Leakage Current		Marking Code
	$V_Z@I_{ZT}$				$Z_{ZT}@I_{ZT}$		$Z_{ZK}@I_{ZK}$		$I_R@V_R$		
	Nom. V	Min. V	Max. V	mA	$\Omega$	mA	$\Omega$	mA	$\mu\text{A}$	V	
PZD22B30C	30	28.5	31.5	5	78	5	300	1	0.1	22.5	BHH
PZD22B33C	33	31.35	34.65	5	88	5	325	1	0.1	25	CHH
PZD22B36C	36	34.2	37.8	5	95	5	350	1	0.1	27	DHH
PZD22B39C	39	37.05	40.95	5	130	5	350	1	0.1	29	EHH
PZD22B43C	43	40.85	45.15	5	150	5	375	1	0.1	32	FHH
PZD22B47C	47	44.65	49.35	5	170	5	375	1	0.1	35	HHH
PZD22B51C	51	48.45	53.55	5	180	5	400	1	0.1	38	IHH
PZD22B56C	56	53.2	58.8	2.5	200	2.5	1000	1	0.1	42	JHH
PZD22B62C	62	58.9	65.1	2.5	225	2.5	1000	1	0.1	46	KHH
PZD22B68C	68	64.6	71.4	2.5	240	2.5	1000	1	0.1	51	LHH
PZD22B75C	75	71.25	78.75	2.5	265	2.5	1000	1	0.1	56	MHH

**NOTES:**

1. Mounted on a  $5\text{mm}^2$  copper pads to each terminal.
2. Mounted on a FR-4 PCB, single-sided copper, mini pad .



# PZD22B2V4C ~ PZD22B75C Series

## TYPICAL CHARACTERISTIC CURVES

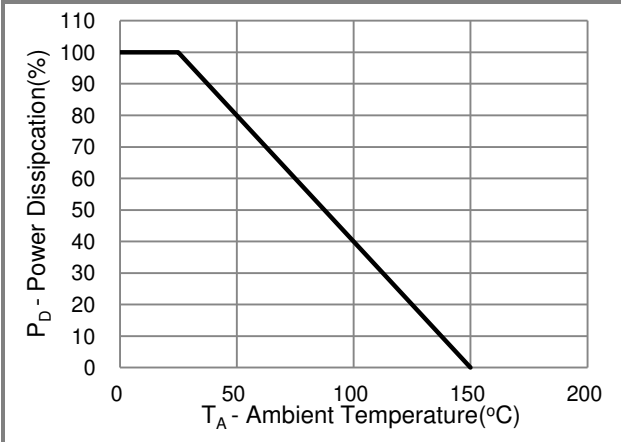


Fig.1 Power Rating Curve

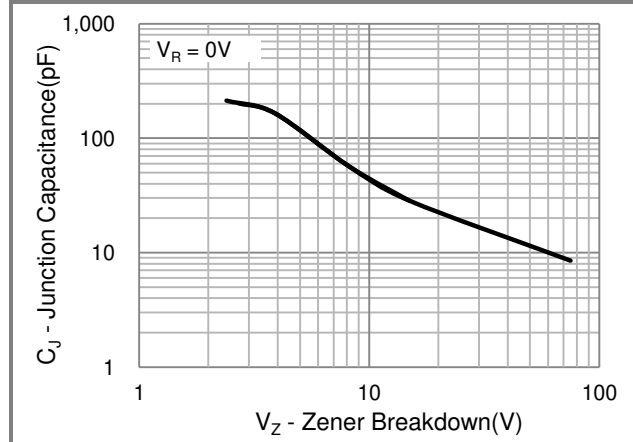


Fig.2 Typical Junction Capacitance

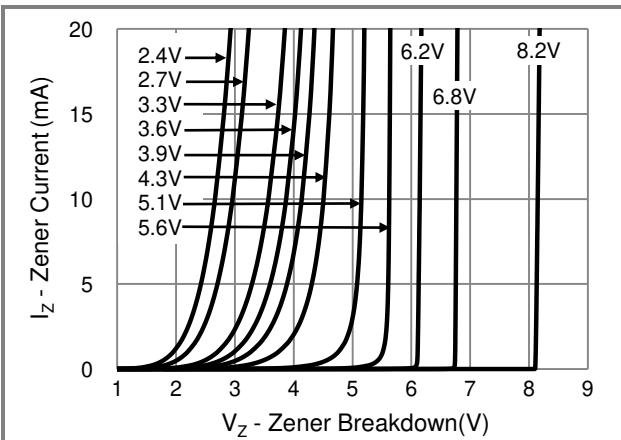


Fig.3 Typical Zener Breakdown

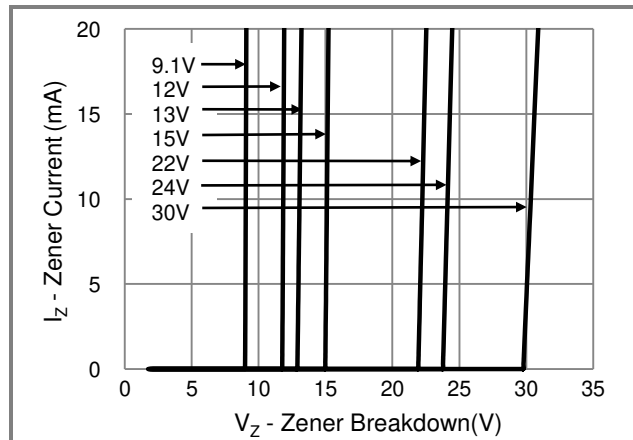


Fig.4 Typical Zener Breakdown

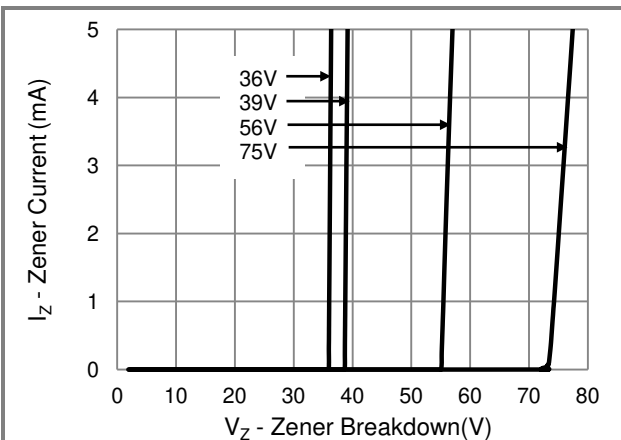


Fig.5 Typical Zener Breakdown

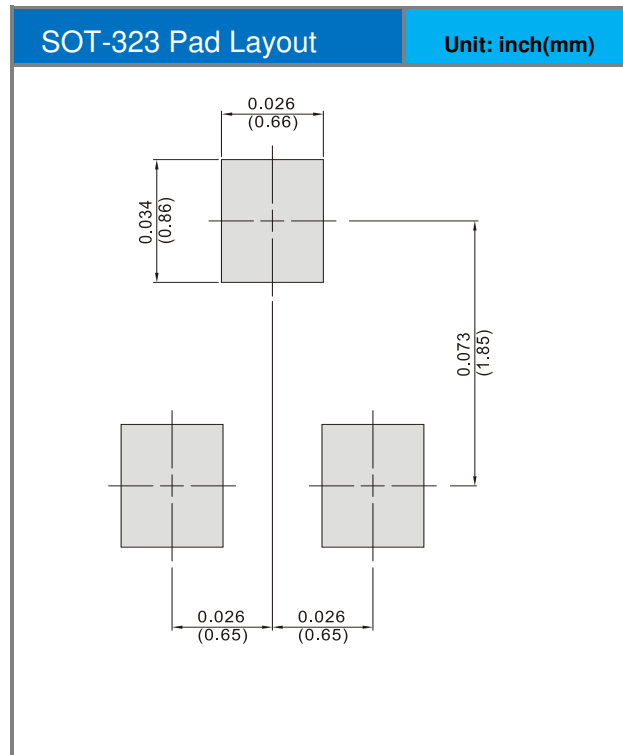
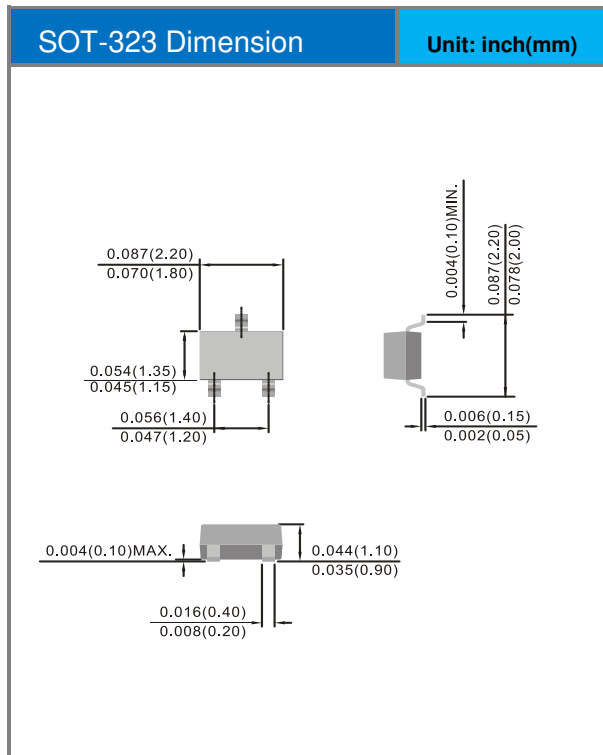


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## Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
PZD22Bxxxx_R1_00001	SOT-323	3K / 7" Reel	See Table	Halogen free

## Packaging Information & Mounting Pad Layout





## **PZD22B2V4C ~ PZD22B75C Series**

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