



## PZ1AFC2V5B ~ PZ1AFC75B Series

### Silicon Zener Diode

**Voltage**

**2.5~75 V**

**Power**

**1 W**

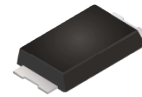
#### Features

- Silicon planar Zener diode
- Low leakage current
- Excellent stability
- Small plastic package suitable for surface-mounted design
- Very low package height: 1 mm
- High temperature soldering : 260 °C/10 seconds at terminals
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

#### Mechanical Data

- Case: Molded plastic, SMAF-C
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0012 ounces, 0.034 grams

#### SMAF-C



### Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Peak Pulse Power Dissipation at T <sub>A</sub> = 25°C <sup>(Note 1)</sup>	P <sub>D</sub>	1	W
ESD Voltage per IEC61000-4-2 (Air)	V <sub>ESD</sub>	±30	kV
ESD Voltage per IEC61000-4-2 (Contact)		±30	
Typical Thermal Resistance <sup>(Note 2)</sup>	R <sub>θJA</sub>	150	°C /W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C



## PZ1AFC2V5B ~ PZ1AFC75B Series

### Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Part Number	Nominal Zener Voltage				Nominal Zener Impedance				Max. Reverse Leakage Current		Marking Code
	V <sub>Z</sub> @I <sub>ZT</sub>				Z <sub>zT</sub> @I <sub>ZT</sub>		Z <sub>zK</sub> @I <sub>zK</sub>		I <sub>R</sub> @V <sub>R</sub>		
	Nom. V	Min. V	Max. V	mA	Ω	mA	Ω	mA	uA	V	
PZ1AFC2V5B	2.5	2.37	2.63	40	15	40	1500	1	200	0.7	1Z2V5B
PZ1AFC3V6B	3.6	3.42	3.78	100	8	100	400	1	100	1	1Z3V6B
PZ1AFC3V9B	3.9	3.71	4.10	100	8	100	400	1	50	1	1Z3V9B
PZ1AFC4V3B	4.3	4.09	4.52	100	7	100	400	1	25	1	1Z4V3B
PZ1AFC4V7B	4.7	4.47	4.94	100	7	100	400	1	10	1	1Z4V7B
PZ1AFC5V1B	5.1	4.85	5.36	100	6	100	550	1	5	1	1Z5V1B
PZ1AFC5V6B	5.6	5.32	5.88	100	4	100	600	1	10	2	1Z5V6B
PZ1AFC6V0B	6	5.7	6.3	100	3	100	600	1	8	2	1Z6V0B
PZ1AFC6V2B	6.2	5.89	6.51	100	3	100	700	1	5	2	1Z6V2B
PZ1AFC6V8B	6.8	6.46	7.14	100	3	100	700	1	10	3	1Z6V8B
PZ1AFC7V5B	7.5	7.13	7.88	100	2	100	700	0.5	50	3	1Z7V5B
PZ1AFC8V2B	8.2	7.79	8.61	100	2	100	700	0.5	10	3	1Z8V2B
PZ1AFC8V7B	8.7	8.27	9.14	50	3	50	700	0.5	10	4	1Z8V7B
PZ1AFC9V1B	9.1	8.65	9.56	50	4	50	700	0.5	10	5	1Z9V1B
PZ1AFC10B	10	9.50	10.50	50	4	50	700	0.25	7	7.5	1Z10B
PZ1AFC11B	11	10.45	11.55	50	7	50	700	0.25	4	8.2	1Z11B
PZ1AFC12B	12	11.40	12.60	50	7	50	700	0.25	3	9.1	1Z12B
PZ1AFC13B	13	12.35	13.65	50	10	50	700	0.25	2	10	1Z13B
PZ1AFC14B	14	13.30	14.70	50	10	50	700	0.25	2	11	1Z14B
PZ1AFC15B	15	14.25	15.75	50	10	50	700	0.25	1	11	1Z15B
PZ1AFC16B	16	15.20	16.80	25	15	25	700	0.25	1	12	1Z16B
PZ1AFC17B	17	16.15	17.85	25	15	25	750	0.25	1	13	1Z17B
PZ1AFC18B	18	17.10	18.90	25	15	25	750	0.25	1	13	1Z18B
PZ1AFC19B	19	18.05	19.95	25	15	25	750	0.25	1	14	1Z19B
PZ1AFC20B	20	19.00	21.00	25	15	25	750	0.25	1	15	1Z20B
PZ1AFC22B	22	20.90	23.10	25	15	25	750	0.25	1	16	1Z22B
PZ1AFC24B	24	22.80	25.20	25	15	25	750	0.25	1	18	1Z24B
PZ1AFC25B	25	23.75	26.25	25	15	25	750	0.25	1	19	1Z25B
PZ1AFC27B	27	25.65	28.35	25	15	25	750	0.25	1	20	1Z27B



## PZ1AFC2V5B ~ PZ1AFC75B Series

### Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Part Number	Nominal Zener Voltage				Nominal Zener Impedance				Max. Reverse Leakage Current		Marking Code
	V <sub>Z</sub> @I <sub>ZT</sub>				Z <sub>ZT</sub> @I <sub>ZT</sub>		Z <sub>ZK</sub> @I <sub>ZK</sub>		I <sub>R</sub> @V <sub>R</sub>		
	Nom. V	Min. V	Max. V	mA	Ω	mA	Ω	mA	uA	V	
PZ1AFC28B	28	26.60	29.40	25	15	25	1000	0.25	1	21	1Z28B
PZ1AFC30B	30	28.50	31.50	25	15	25	1000	0.25	1	22	1Z30B
PZ1AFC33B	33	31.35	34.65	25	15	25	1000	0.25	1	24	1Z33B
PZ1AFC36B	36	34.20	37.80	10	40	10	1000	0.25	1	27	1Z36B
PZ1AFC39B	39	37.05	40.95	10	40	10	1000	0.25	1	30	1Z39B
PZ1AFC43B	43	40.85	45.15	10	45	10	1500	0.25	1	33	1Z43B
PZ1AFC47B	47	44.65	49.35	10	45	10	1500	0.25	1	36	1Z47B
PZ1AFC51B	51	48.45	53.55	10	60	10	1500	0.25	1	39	1Z51B
PZ1AFC56B	56	53.20	58.80	10	60	10	2000	0.25	1	43	1Z56B
PZ1AFC62B	62	58.90	65.10	10	80	10	2000	0.25	1	47	1Z62B
PZ1AFC68B	68	64.60	71.40	10	80	10	2000	0.25	1	51	1Z68B
PZ1AFC75B	75	71.25	78.75	10	100	10	2000	0.25	1	56	1Z75B

**NOTES:**

1. Mounted on 1 inch square copper pads to each terminal.
2. Mounted on a FR-4 PCB, single-sided copper, standard footprint.



# PZ1AFC2V5B ~ PZ1AFC75B Series

## TYPICAL CHARACTERISTIC CURVES

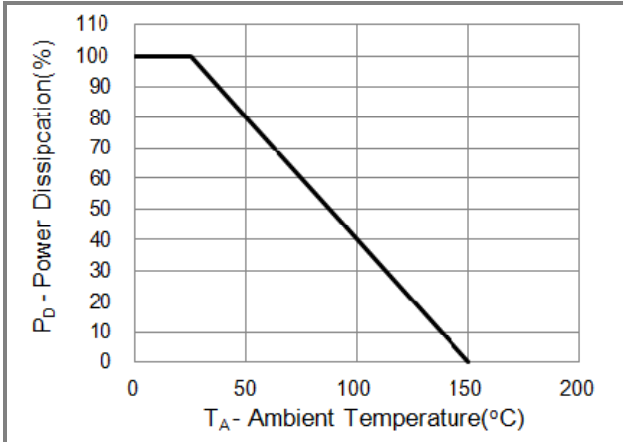


Fig.1 Power Derating Curve

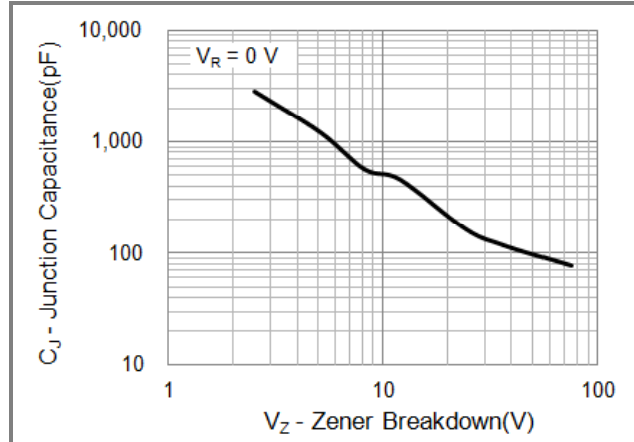


Fig.2 Typical Junction Capacitance

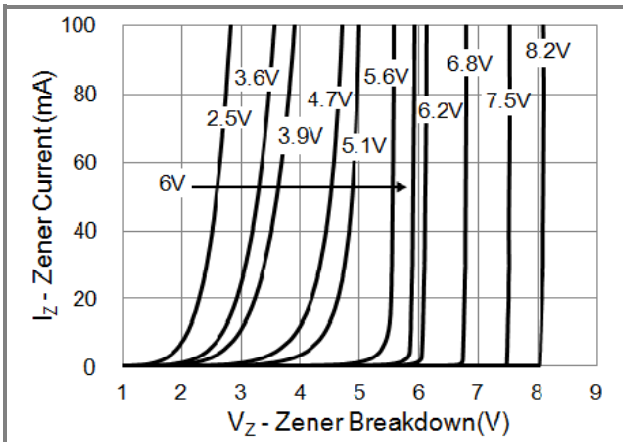


Fig.3 Typical Zener Breakdown

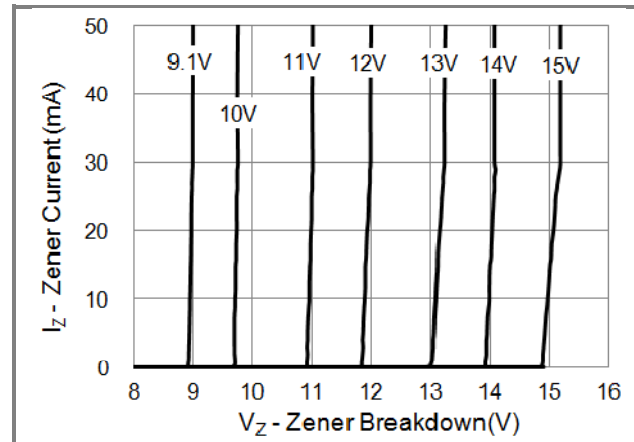


Fig.4 Typical Zener Breakdown

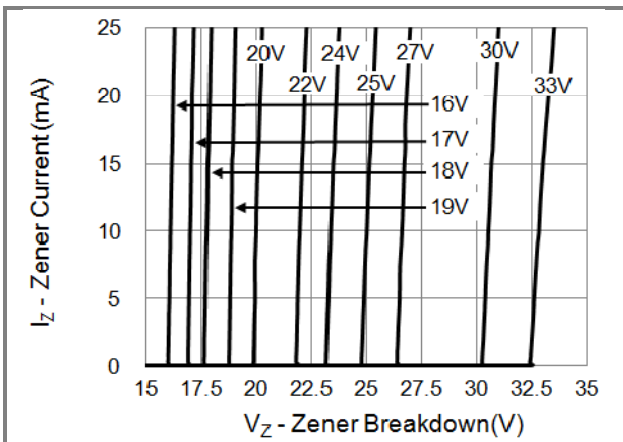


Fig.5 Typical Zener Breakdown

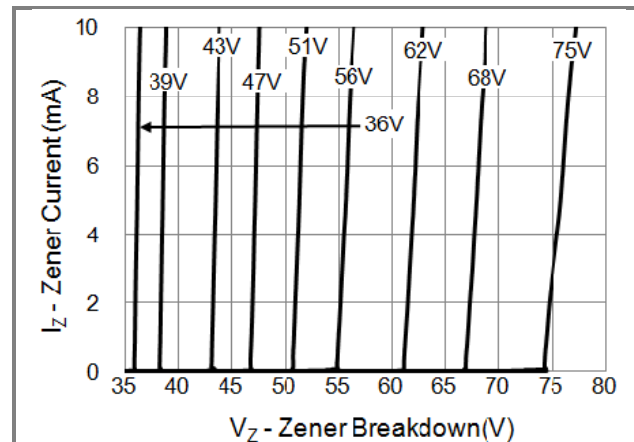


Fig.6 Typical Zener Breakdown

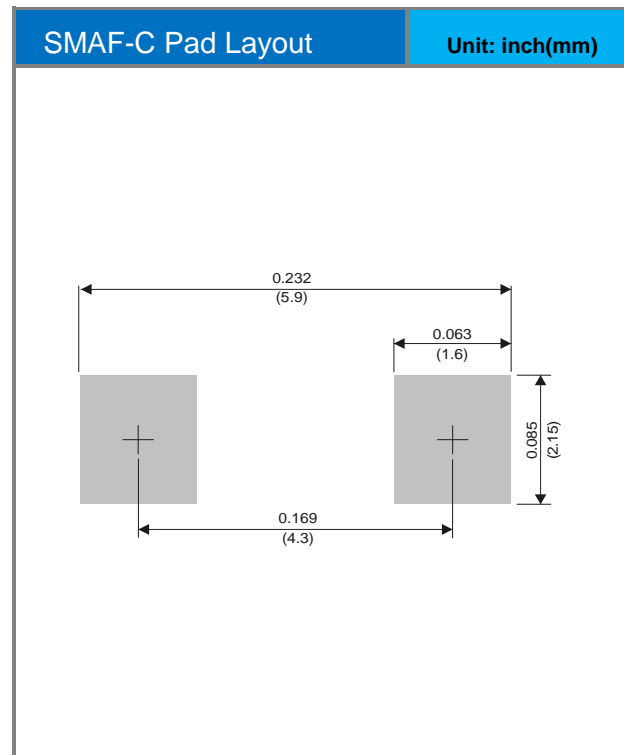
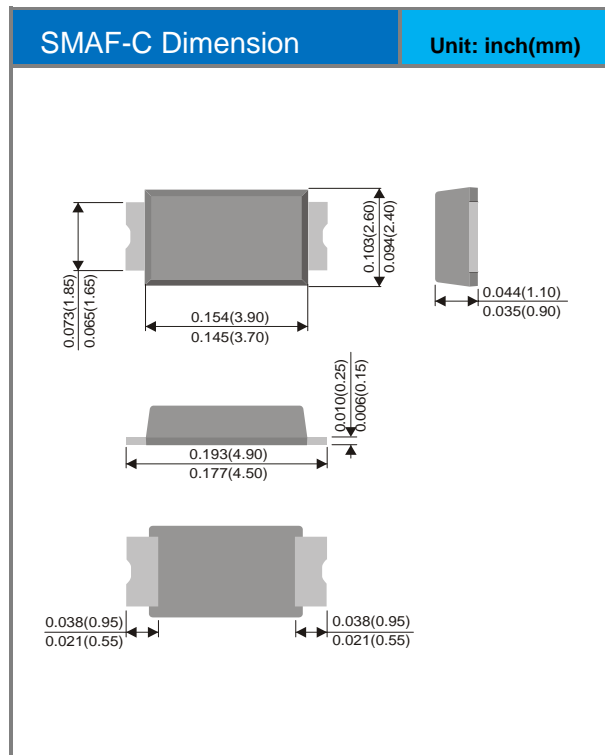


# PZ1AFC2V5B ~ PZ1AFC75B Series

## Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
PZ1AFCxxxB_R1_00001	SMAF-C	3K pcs / 7" reel	See Table	Halogen free

## Packaging Information & Mounting Pad Layout





## **PZ1AFC2V5B ~ PZ1AFC75B Series**

### **Disclaimer**

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

单击下面可查看定价，库存，交付和生命周期等信息

[>>Panjit\(强茂\)](#)