



1SMB5921-AU ~ 1SMB5942-AU Series

SILICON ZENER DIODE

Voltage

6.8~51 V

Power

1.5 W

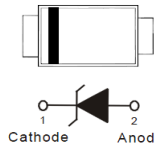
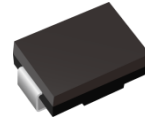
Features

- Silicon planar Zener diode
- Low profile surface-mount package
- Low leakage current
- Excellent stability
- 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
- AEC-Q101 qualified

Mechanical Data

- Case: SMB, plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.0032 ounces, 0.092 grams

SMB



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Peak Pulse Power Dissipation on T _L = 75 °C Derate above 75 °C	P _D ⁽¹⁾	1.5	W
Typical Thermal Resistance	R _{θJA} ⁽²⁾	135	°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C



1SMB5921-AU ~ 1SMB5942-AU Series

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	Ω	mA	Ω	mA	uA	V	
1SMB5921-AU	6.8	6.46	7.14	55.1	3	55.1	200	1	5	5.2	921B
1SMB5922-AU	7.5	7.13	7.88	50	3	50	400	0.5	5	6	922B
1SMB5923-AU	8.2	7.79	8.61	45.7	4	45.7	400	0.5	5	6.5	923B
1SMB5924-AU	9.1	8.65	9.56	41.2	4	41.2	500	0.5	5	7	924B
1SMB5925-AU	10	9.5	10.5	37.5	5	37.5	500	0.25	5	8	925B
1SMB5926-AU	11	10.45	11.55	34.1	6	34.1	550	0.25	1	8.4	926B
1SMB5927-AU	12	11.4	12.6	31.2	7	31.2	550	0.25	1	9.1	927B
1SMB5928-AU	13	12.35	13.65	28.8	7	28.8	550	0.25	1	9.9	928B
1SMB5929-AU	15	14.25	15.75	25	9	25	600	0.25	1	11.4	929B
1SMB5930-AU	16	15.2	16.8	23.4	10	23.4	600	0.25	1	12.2	930B
1SMB5931-AU	18	17.1	18.9	20.8	12	20.8	650	0.25	1	13.7	931B
1SMB5932-AU	20	19	21	18.7	14	18.7	650	0.25	1	15.2	932B
1SMB5933-AU	22	20.9	23.1	17	18	17	650	0.25	1	16.7	933B
1SMB5934-AU	24	22.8	25.2	15.6	19	15.6	700	0.25	1	18.2	934B
1SMB5935-AU	27	25.65	28.35	13.9	23	13.9	700	0.25	1	20.6	935B
1SMB5936-AU	30	28.5	31.5	12.5	26	12.5	750	0.25	1	22.8	936B
1SMB5937-AU	33	31.35	34.65	11.4	33	11.4	800	0.25	1	25.1	937B
1SMB5938-AU	36	34.2	37.8	10.4	38	10.4	850	0.25	1	27.4	938B
1SMB5939-AU	39	37.05	40.95	9.6	45	9.6	900	0.25	1	29.7	939B
1SMB5940-AU	43	40.85	45.15	8.7	53	8.7	950	0.25	1	32.7	940B
1SMB5941-AU	47	44.65	49.35	8	67	8	1000	0.25	1	35.8	941B
1SMB5942-AU	51	48.45	53.55	7.3	70	7.3	1100	0.25	1	38.8	942B

NOTES:

1. Mounted on a FR-4 PCB, single-sided copper, with 100cm² copper pad area.
2. Mounted on a FR-4 PCB, single-sided copper, mini pad .



1SMB5921-AU ~ 1SMB5942-AU Series

TYPICAL CHARACTERISTIC CURVES

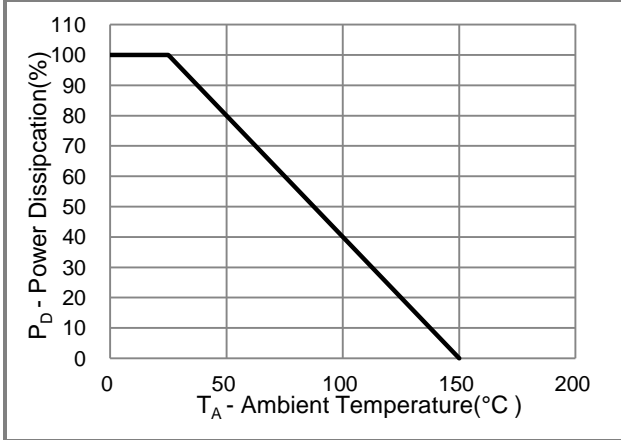


Fig.1 Power Derating Curve

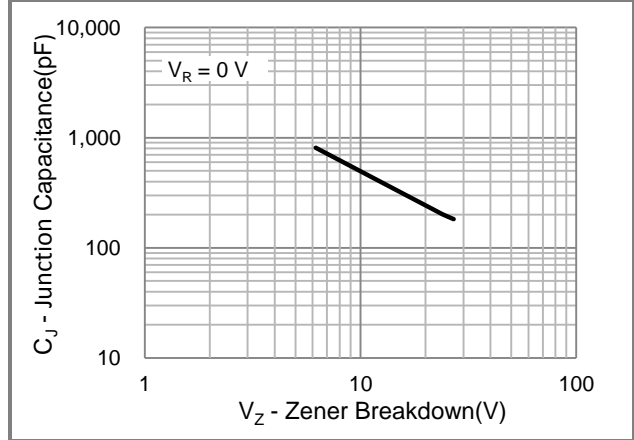


Fig.2 Typical Junction Capacitance

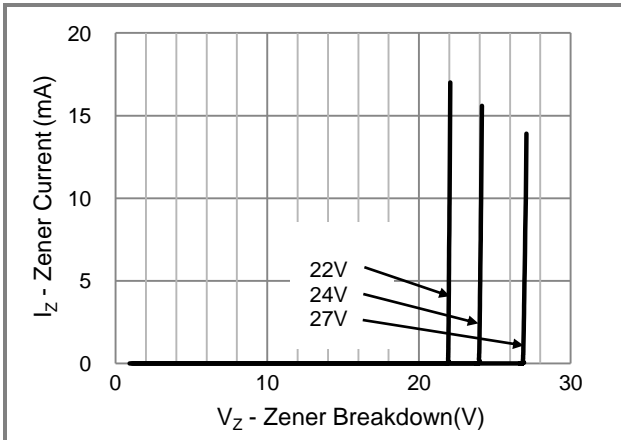


Fig.3 Typical Zener Breakdown

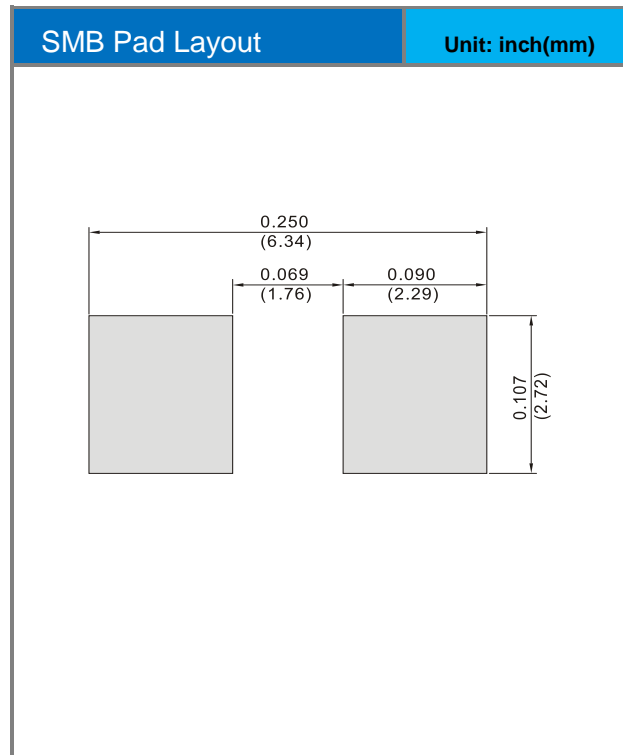
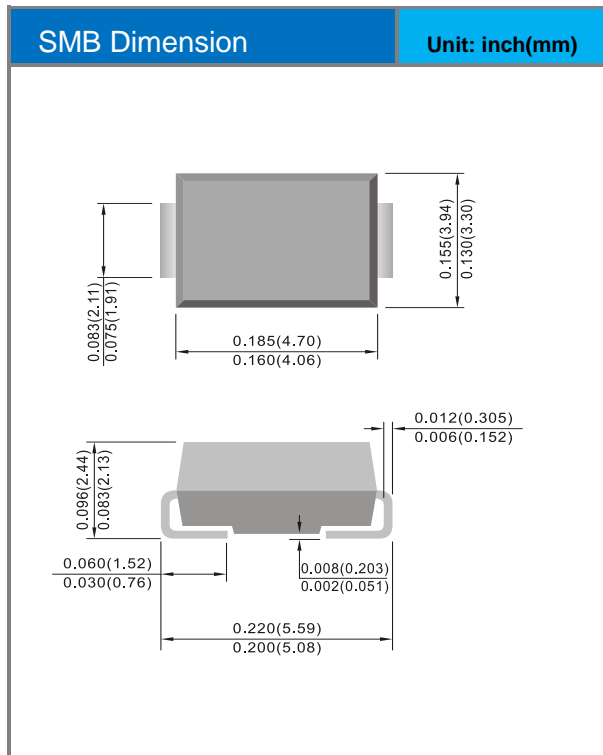


1SMB5921-AU ~ 1SMB5942-AU Series

Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
1SMB59xx-AU_R2_000A1	SMB	3K pcs / 13" reel	See Table	Halogen free

Packaging Information & Mounting Pad Layout





1SMB5921-AU ~ 1SMB5942-AU 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 relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, 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\(强茂\)](#)