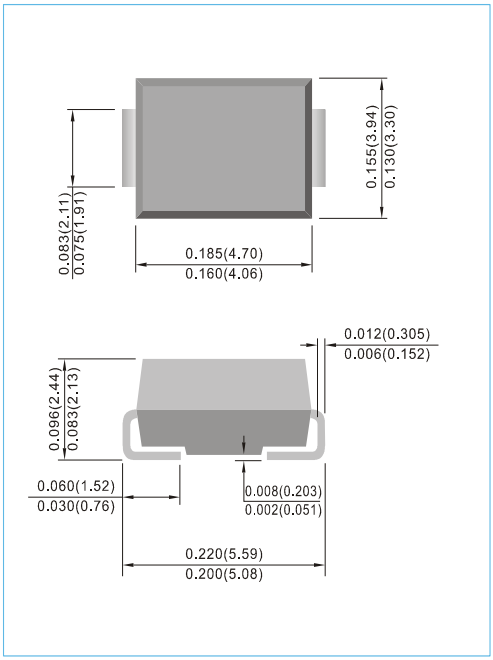
1SMB3EZ5.6~1SMB3EZ51

GLASS PASSIVATED JUNCTION SILICON ZENER DIODES

VOLTAGE 5.6 to 51 Volt **POWER** 3 Watt

SMB / DO-214AA Unit : inch(mm)

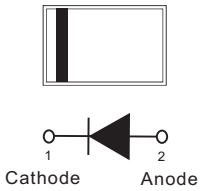


FEATURES

- Low inductance
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- 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: JEDEC DO-214AA, Molded plastic over passivated junction
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packing: 12mm tape (E1A-481)
- Weight: 0.0032 ounce, 0.092 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Units
Steady State Power Dissipation at T_L=75 °C (Note 1)	P_D	3	W
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	15	A
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to + 150	°C

NOTE :

1. Mounted on infinite heatsink.

1SMB3EZ5.6~1SMB3EZ51

Part Number	Nominal Zener Voltage			Maximum 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	Ω	mA	Ω	mA	μA	V	
1SMB3EZ5.6	5.6	5.32	5.88	2	134	700	1	5	3	5V6B
1SMB3EZ6.2	6.2	5.89	6.51	2	120	700	1	5	4	6V2B
1SMB3EZ6.8	6.8	6.46	7.14	2	110	700	1	5	4	6V8B
1SMB3EZ7.5	7.5	7.13	7.88	2	100	700	0.5	5	5	7V5B
1SMB3EZ8.2	8.2	7.79	8.61	2	91	700	0.5	5	6	8V2B
1SMB3EZ8.7	8.7	8.27	9.14	2	85	700	0.5	4	6.6	8V7B
1SMB3EZ9.1	9.1	8.65	9.56	3	82	700	0.5	3	7	9V1B
1SMB3EZ10	10	9.5	10.5	4	75	700	0.25	3	7.6	10B
1SMB3EZ11	11	10.45	11.55	4	68	700	0.25	1	8.4	11B
1SMB3EZ12	12	11.4	12.6	5	63	700	0.25	1	9.1	12B
1SMB3EZ13	13	12.35	13.65	5	58	700	0.25	0.5	9.9	13B
1SMB3EZ14	14	13.3	14.7	5	53	700	0.25	0.5	10.6	14B
1SMB3EZ15	15	14.25	15.75	6	50	700	0.25	0.5	11.4	15B
1SMB3EZ16	16	15.2	16.8	6	47	700	0.25	0.5	12.2	16B
1SMB3EZ17	17	16.15	17.85	6	44	750	0.25	0.5	13	17B
1SMB3EZ18	18	17.1	18.9	6	42	750	0.25	0.5	13.7	18B
1SMB3EZ19	19	18.05	19.95	7	40	750	0.25	0.5	14.4	19B
1SMB3EZ20	20	19	21	7	37	750	0.25	0.5	15.2	20B
1SMB3EZ22	22	20.9	23.1	8	34	750	0.25	0.5	16.7	22B
1SMB3EZ24	24	22.8	25.2	9	31	750	0.25	0.5	18.2	24B
1SMB3EZ25	25	23.75	26.25	10	30	750	0.25	0.5	19	25B
1SMB3EZ27	27	25.65	28.35	10	28	750	0.25	0.5	20.6	27B
1SMB3EZ28	28	26.6	29.4	12	27	750	0.25	0.5	21.3	28B
1SMB3EZ30	30	28.5	31.5	16	25	1000	0.25	0.5	22.5	30B
1SMB3EZ33	33	31.35	34.65	20	23	1000	0.25	0.5	25.1	33B
1SMB3EZ36	36	34.2	37.8	22	21	1000	0.25	0.5	27.4	36B
1SMB3EZ39	39	37.05	40.95	28	19	1000	0.25	0.5	29.7	39B
1SMB3EZ43	43	40.85	45.15	33	17	1500	0.25	0.5	32.7	43B
1SMB3EZ47	47	44.65	49.35	38	16	1500	0.25	0.5	35.8	47B
1SMB3EZ51	51	48.45	53.55	45	15	1500	0.25	0.5	38.8	51B

1SMB3EZ5.6~1SMB3EZ51

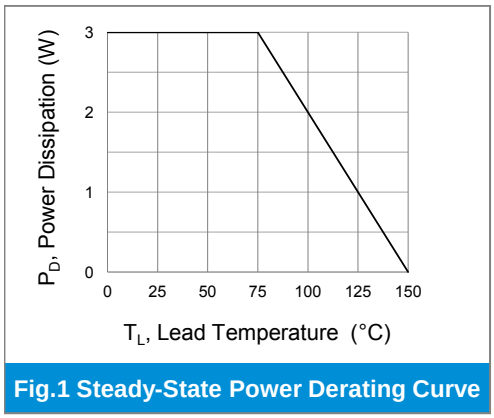


Fig.1 Steady-State Power Derating Curve

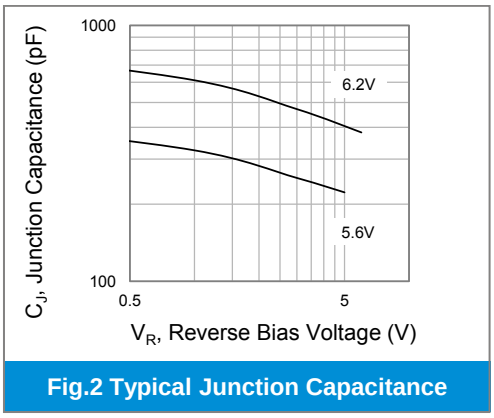


Fig.2 Typical Junction Capacitance

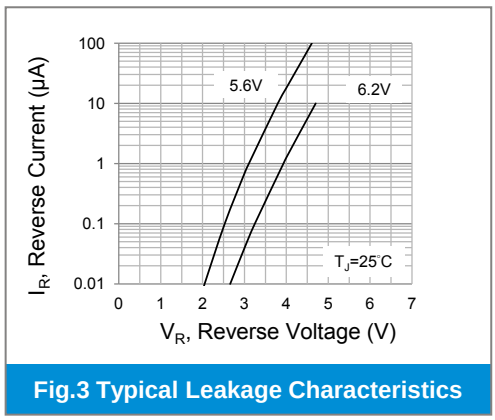


Fig.3 Typical Leakage Characteristics

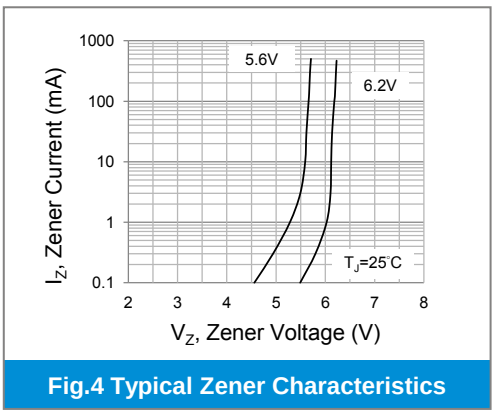


Fig.4 Typical Zener Characteristics

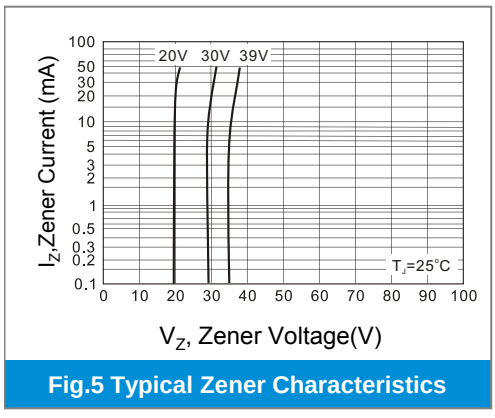


Fig.5 Typical Zener Characteristics

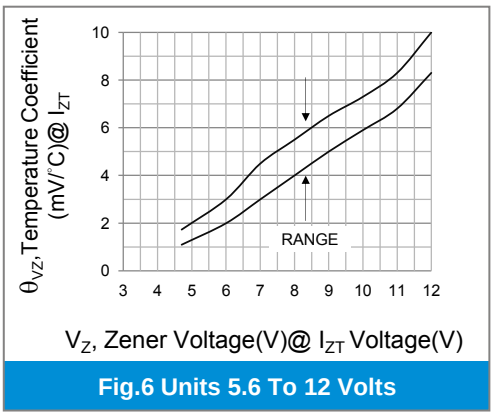


Fig.6 Units 5.6 To 12 Volts

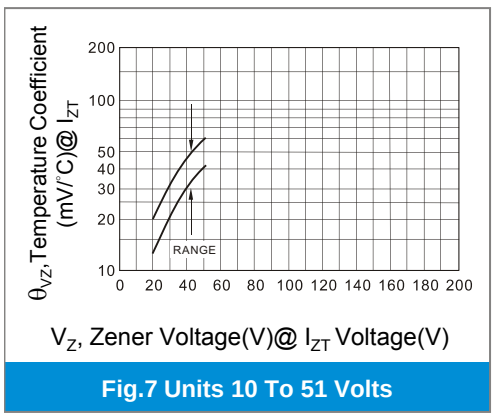
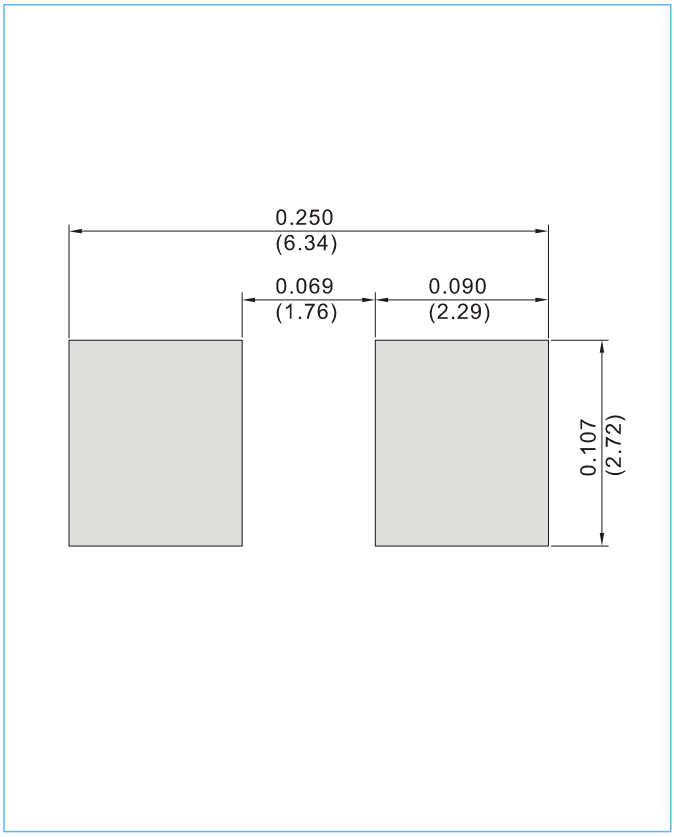


Fig.7 Units 10 To 51 Volts

1SMB3EZ5.6~1SMB3EZ51

MOUNTING PAD LAYOUT

SMB / DO-214AA Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 3K per 13" plastic Reel

  T/R - 0.8K per 7" plastic Reel

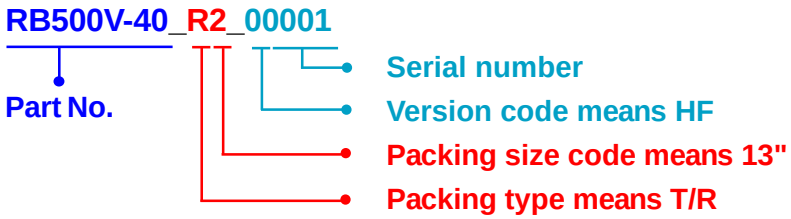
1SMB3EZ5.6~1SMB3EZ51

Part No_packing code_Version

1SMB3EZ5.6_R1_00001

1SMB3EZ5.6_R2_00001

For example :



Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

1SMB3EZ5.6~1SMB3EZ51

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