

Features

- Low profile package
- Ideal for automated placement
- High reliability
- Glass passivated chip
- Low Zener impedance
- Low regulation factor
- For use in stabilizing and clipping circuits with high power rating
- Component in accordance to RoHS 2002/95/1 and WEEE 2002/96/EC



SMB (DO - 214AA)

Mechanical Data

- **Case:** JEDEC DO-214AA molded plastic body over glass passivated chip
- **Terminals:** Solder plated, solderable per MIL-STD-750 Method 2026
- **Polarity:** types the band by laser denotes the cathode

Applications

- Voltage stabilization
- Voltage regulation

Maximum Ratings & Thermal Characteristics

(T_A = 25 °C unless otherwise noted)

Items	Symbol	Value	UNIT
Maximum steady state power dissipation at T _L = 75 °C	P _{TOT}	3	W
Typical thermal resistance, junction to ambient ⁽¹⁾	R _{θJA}	230	°C / W
Typical thermal resistance, junction to lead ⁽¹⁾	R _{θJL}	22	°C / W
Maximum instantaneous forward voltage at 200 mA for all types ⁽²⁾	V _F	1.5	V
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150	°C

Note1 Mounted on P.C.B. with 0.28" x 0.28" (7mm x 7mm) copper pad areas attached to each terminal.

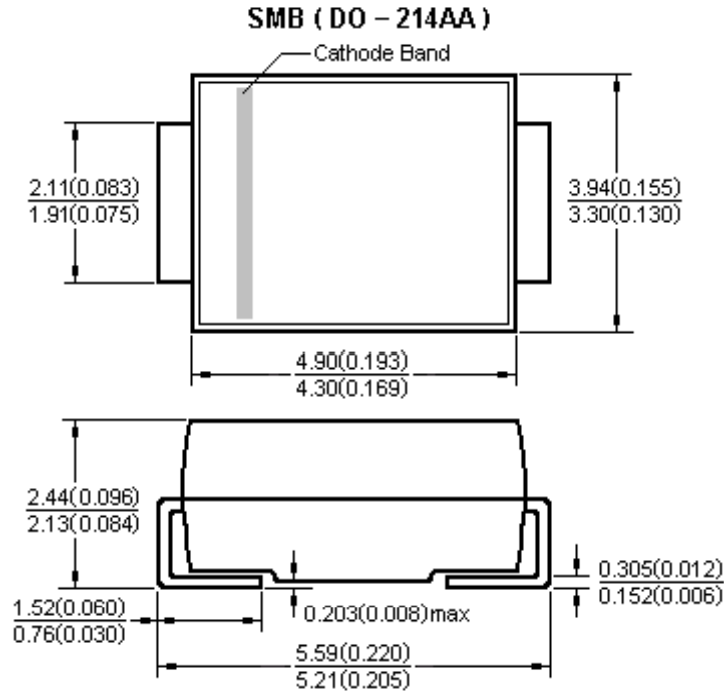
Note2 Pulse test: 300 μs pulse width, 1 % duty cycle

Electrical Characteristics TA =25℃ unless otherwise noted.

Device House No. ⁽³⁾	Device Marking	Zener Voltage Range			Test Current		Zener Impedance		Leakage Current		I _{ZM}
		V _Z @I _{ZT}			I _{ZT}	I _{ZK}	Z _{ZT} @I _{ZT}	Z _{ZK} @I _{ZK}	I _R @V _R		
		V			mA	mA	Ω	Ω	μA	V	mA(dc)
		Min	Nom	Max			Max	Max	Max		Max
3BZ5.6	19B	5.32	5.6	5.88	66.9	1.0	5	700	5	3	267
3BZ6.2	20B	5.89	6.2	6.51	60.5	1.0	2	700	5	4	241
3BZ6.8	21B	6.46	6.8	7.14	55.1	1.0	2.5	400	5	5.2	220
3BZ9.1	24B	8.64	9.1	9.56	41.2	0.5	4	1000	5	7	164
3BZ10	25B	9.5	10	10.5	37.5	0.25	4.5	1000	5	8	150
3BZ11	26B	10.5	11	11.6	34.1	0.25	5.5	550	1	8.4	136
3BZ12	27B	11.4	12	12.6	31.2	0.25	6.5	550	1	9.1	125
3BZ13	28B	12.4	13	13.7	28.8	0.25	7	550	1	9.9	115
3BZ15	29B	14.3	15	15.8	25.0	0.25	9	600	1	11.4	100
3BZ16	30B	15.2	16	16.8	23.4	0.25	10	600	1	12.2	93
3BZ18	31B	17.1	18	18.9	20.8	0.25	12	650	1	13.7	83
3BZ20	32B	19	20	21	18.7	0.25	14	650	1	15.2	75
3BZ22	33B	20.9	22	23.1	17.0	0.25	17.5	650	1	16.7	68
3BZ24	34B	22.8	24	25.2	15.6	0.25	19	700	1	18.2	62
3BZ27	35B	25.7	27	28.4	13.9	0.25	23	700	1	20.6	55
3BZ30	36B	28.5	30	31.5	12.5	0.25	28	750	1	22.8	50
3BZ33	37B	31.4	33	34.7	11.4	0.25	33	800	1	25.1	45
3BZ36	38B	34.2	36	37.8	10.4	0.25	38	850	1	27.4	41
3BZ39	39B	37.1	39	41	9.6	0.25	45	900	1	29.7	38
3BZ43	40B	40.9	43	45.2	8.7	0.25	53	950	1	32.7	34
3BZ47	41B	44.6	47	49.4	8.0	0.25	67	1000	1	35.8	31
3BZ51	42B	48.4	51	53.6	7.3	0.25	70	1100	1	38.8	29
3BZ56	43B	53.2	56	58.8	6.7	0.25	86	1300	1	42.6	26
3BZ62	44B	58.9	62	65.1	6.0	0.25	100	1500	1	47.1	24
3BZ68	45B	64.6	68	71.4	5.5	0.25	120	1700	1	51.7	22

Note3 TOLERANCE AND TYPE NUMBER DESIGNATION The Device House No. listed indicate a tolerance of ±5%.

Package Outline



Dimensions in millimeters and (inches)

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