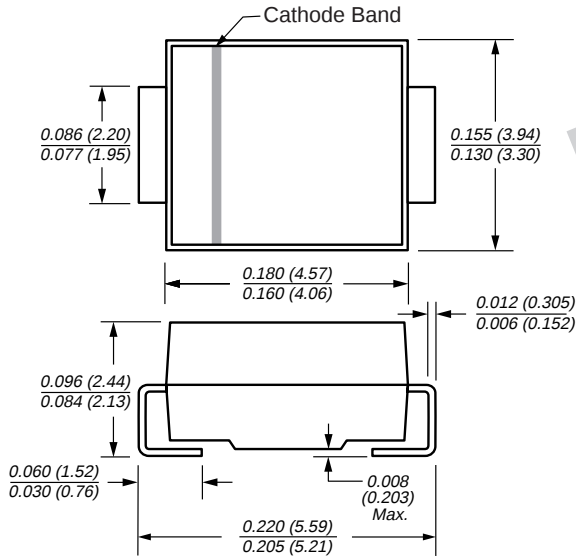


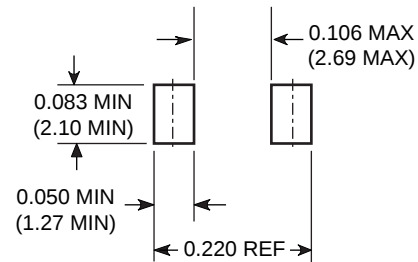


DO-214AA (SMBJ-Bend)



Extended Voltage
Range

Mounting Pad Layout



Mechanical Data

Case: JEDEC DO-214AA molded plastic over glass passivated junction

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Band denotes cathode

Mounting Position: Any **Weight:** 0.003oz., 0.093g

Packaging Codes – Options (Antistatic):

51 – 2K per Bulk box, 20K/carton

52 – 750 per 7" plastic Reel (12mm tape), 15K/carton

5B – 3.2K per 13" plastic Reel (12mm tape), 32K/carton

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Glass passivated chip junction
- Low Zener impedance
- Low regulation factor
- High temperature soldering guaranteed: 250°C/10 seconds at terminals
- Contact local sales office for gull-wing (SMZG prefix) lead form (DO-215AA)

Maximum Electrical Characteristics

Operating Junction and Storage Temperature Range: T_J, T_{STG} : -55°C to +150°C

Part Number	Device Marking Code	Nominal Zener Voltage V_Z at I_{ZT} (V)	Test Current I_{ZT} (mA)	Max. Zener Impedance Leakage Current			Max. Reverse Current I_R at V_R		Max. Zener Current I_{ZM} (mA)
				Z_{ZT} at I_{ZT} (Ω)	Z_{ZK} at I_{ZK} (Ω)	(mA)	(μ A)	(V)	
SMZJ3788A,B	VK,L	9.1	41.2	4.0	1000	0.50	50	7.0	140
SMZJ3789A,B	WA,B	10	37.5	5.0	1000	0.25	50	7.6	125
SMZJ3790A,B	WC,D	11	34.1	6.0	650	0.25	10	8.4	115
SMZJ3791A,B	WE,F	12	31.2	7.0	550	0.25	5.0	9.1	105
SMZJ3792A,B	WG,H	13	28.8	7.5	550	0.25	5.0	9.9	98
SMZJ3793A,B	WI,J	15	25.0	9.0	600	0.25	5.0	11.4	85
SMZJ3794A,B	WK,L	16	23.4	10.0	600	0.25	5.0	12.2	80
SMZJ3795A,B	XA,B	18	20.8	12.0	650	0.25	5.0	13.7	70
SMZJ3796A,B	XC,D	20	18.7	14.0	650	0.25	5.0	15.2	62
SMZJ3797A,B	XE,F	22	17.0	17.5	650	0.25	5.0	16.7	56
SMZJ3798A,B	XG,H	24	15.6	19.0	700	0.25	5.0	18.2	51
SMZJ3799A,B	XI,J	27	13.9	23.0	700	0.25	5.0	20.6	46

Notes: (1) Standard voltage tolerance is $\pm 20\%$, suffix "A" denotes $\pm 10\%$ and suffix "B" denotes $\pm 5\%$

(2) Maximum steady state power dissipation is 1.5W at $T_L = 75^\circ\text{C}$ (See Fig. 1)

Surface Mount Zener Diodes

Max. Electrical Characteristics (con't.) Operating Junction and Storage Temperature Range: T_J, T_{STG} : -55°C to $+150^{\circ}\text{C}$

Part Number Modified J-Bend	Device Marking Code	Nominal Zener Voltage V_Z at I_{ZT} (V)	Test Current I_{ZT} (mA)	Max. Zener Impedance Leakage Current			Max. Reverse Current I_R at V_R		Max. Zener Current I_{ZM} (mA)
				Z_{ZT} at I_{ZT} (Ω)	Z_{ZK} at I_{ZK} (Ω)	(mA)	(μA)	(V)	
SMZJ3800A,B	XK,L	30	12.5	26.0	750	0.25	5.0	22.8	41
SMZJ3801A,B	YA,B	33	11.4	33.0	800	0.25	5.0	25.1	38
SMZJ3802A,B	YC,D	36	10.4	38.0	850	0.25	5.0	27.4	35
SMZJ3803A,B	YE,F	39	9.6	45.0	900	0.25	5.0	29.7	31
SMZJ3804A,B	YG,H	43	8.7	53.0	950	0.25	5.0	32.7	28
SMZJ3805A,B	YI,J	47	8.0	67.0	1000	0.25	5.0	35.8	26
SMZJ3806A,B	YK,L	51	7.3	70.0	1100	0.25	5.0	38.8	24
SMZJ3807A,B	ZA,B	56	6.7	86.0	1300	0.25	5.0	42.6	22
SMZJ3808A,B	ZC,D	62	6.0	100.0	1500	0.25	5.0	47.1	20
SMZJ3809A,B	ZE,F	68	5.5	120.0	1700	0.25	5.0	51.7	18

Notes: (1) Standard voltage tolerance is $\pm 20\%$, suffix "A" denotes $\pm 10\%$ and suffix "B" denotes $\pm 5\%$

(2) Maximum steady state power dissipation is 1.5W at $T_L = 75^{\circ}\text{C}$ (See Fig. 1)

Ratings and Characteristic Curves ($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

Fig. 1 – Maximum Continuous Power Dissipation

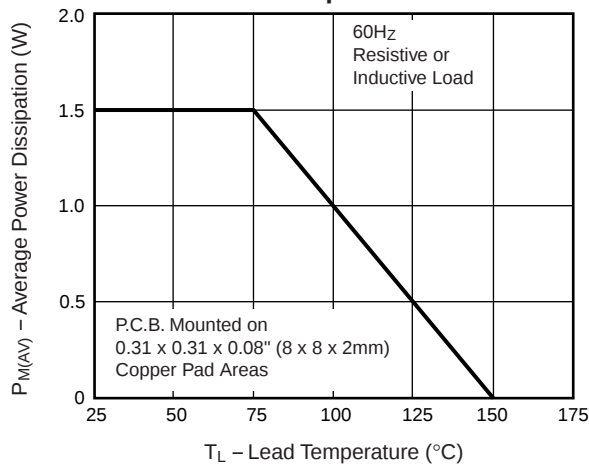


Fig. 2 – Typical Zener Impedance

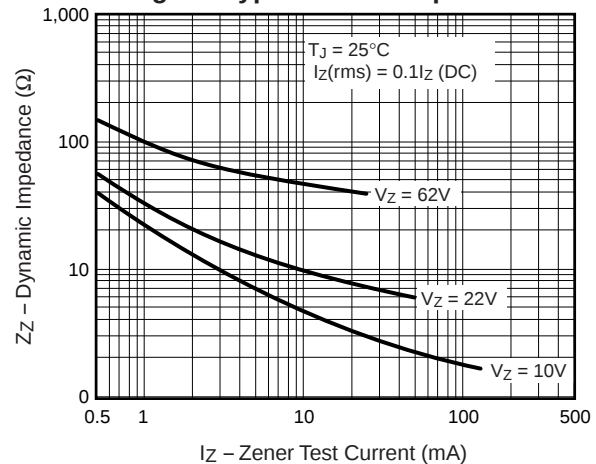


Fig. 3 – Typical Zener Impedance

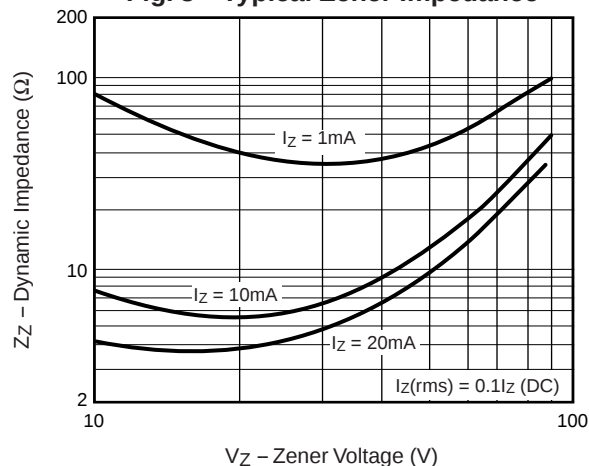


Fig. 4 – Typical Temperature Coefficients

