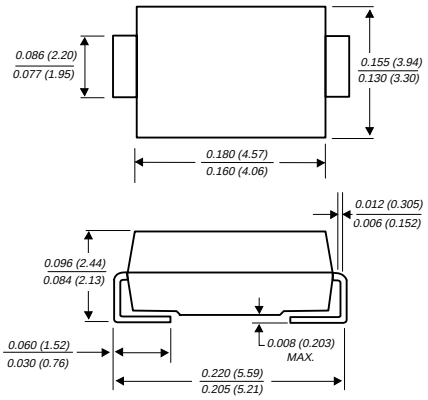
SMZG AND SMZJ 3789 THRU 3809B

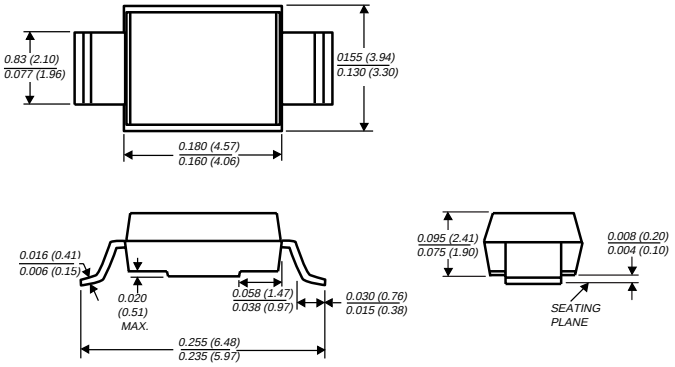
SURFACE MOUNT ZENER DIODE

Zener Voltage -*10 to 68 Volts* ***Steady State Power -*** *1.5 Watts*

DO-214AA
MODIFIED J-BEND



DO-215AA



Dimensions in inches and (millimeters)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mount applications
- Glass passivated chip junction
- Low Zener impedance
- Low regulation factor
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214/DO215AA molded plastic over passivated junction
Terminals: Solder plated, solderable per MIL STD-750, Method 2026
Polarity: Color band denotes positive end (cathode)
Mounting Position: Any
Weight: 0.003 ounce , 0.093 gram

OPERATING JUNCTION AND STORAGE TEMPERATURE RANGE: T_J, T_{STG}: -55°C to +150°C

MAXIMUM ELECTRICAL CHARACTERISTICS

PART NUMBER		DEVICE MARKING CODE	NOMINAL ZENER VOLTAGE V_Z at I_{ZT} (Volts)	TEST CURRENT I_{ZT} (mA)	MAX. ZENER IMPEDANCE			MAX. REVERSE LEAKAGE CURRENT I_R at V_R		MAX. ZENER CURRENT I_{ZM} (mA)
GULL-WING	MODIFIED J-BEND				Z_{ZT} at I_{ZT}	Z_{ZK} at I_{ZK}				
					(Ohms)	(Ohms)	(mA)	(μA)	(Volts)	
SMZG3789A,B	SMZJ3789A,B	WA,B	10.0	37.5	5.0	1000	0.25	50.0	7.6	125
SMZG3790A,B	SMZJ3790A.B	WC,D	11.0	34.1	6.0	650	0.25	10.0	8.4	115
SMZG3791A,B	SMZJ3791A,B	WE,F	12.0	31.2	7.0	550	0.25	5.0	9.1	105
SMZG3792A,B	SMZJ3792A,B	WG,H	13.0	28.8	7.5	550	0.25	5.0	9.9	98
SMZG3793A,B	SMZJ3793A,B	WI,J	15.0	25.0	9.0	600	0.25	5.0	11.4	85
SMZG3794A,B	SMZJ3794A,B	WK,L	16.0	23.4	10.0	600	0.25	5.0	12.2	80
SMZG3795A,B	SMZJ3795A,B	XA,B	18.0	20.8	12.0	650	0.25	5.0	13.7	70
SMZG3796A,B	SMZJ3796A,B	XC,D	20.0	18.7	14.0	650	0.25	5.0	15.2	62
SMZG3797A,B	SMZJ3797A,B	XE,F	22.0	17.0	17.5	650	0.25	5.0	16.7	56
SMZG3798A,B	SMZJ3798A,B	XG,H	24.0	15.6	19.0	700	0.25	5.0	18.2	51
SMZG3799A,B	SMZJ3799A,B	XI,J	27.0	13.9	23.0	700	0.25	5.0	20.6	46
SMZG3800A,B	SMZJ3800A,B	XK,L	30.0	12.5	26.0	750	0.25	5.0	22.8	41
SMZG3801A,B	SMZJ3801A,B	YA,B	33.0	11.4	33.0	800	0.25	5.0	25.1	38
SMZG3802A,B	SMZJ3802A,B	YC,D	36.0	10.4	38.0	850	0.25	5.0	27.4	35
SMZG3803A,B	SMZJ3803A,B	YE,F	39.0	9.6	45.0	900	0.25	5.0	29.7	31
SMZG3804A,B	SMZJ3804A,B	YG,H	43.0	8.7	53.0	950	0.25	5.0	32.7	28
SMZG3805A.B	SMZJ3805A,B	YI,J	47.0	8.0	67.0	1000	0.25	5.0	35.8	26
SMZG3806A,B	SMZJ3806A,B	YK,L	51.0	7.3	70.0	1100	0.25	5.0	38.8	24
SMZG3807A,B	SMZJ3807A,B	ZA,B	56.0	6.7	86.0	1300	0.25	5.0	42.6	22
SMZG3808A,B	SMZJ3808A,B	ZC,D	62.0	6.0	100.0	1500	0.25	5.0	47.1	20
SMZG3809A,B	SMZJ3809A,B	ZE,F	68.0	5.5	120.0	1700	0.25	5.0	51.7	18

NOTES:
(1) Standard voltage tolerance is ±20%, suffix “A” denotes ±10% and suffix “B” denotes ±5%
(2) Maximum steady state power dissipation is 1.5 watts at T_L=75°C (SEE FIG. 1)

1/20/99

GENERAL SEMICONDUCTOR®

FIG. 1 - MAXIMUM CONTINUOUS POWER DISSIPATION

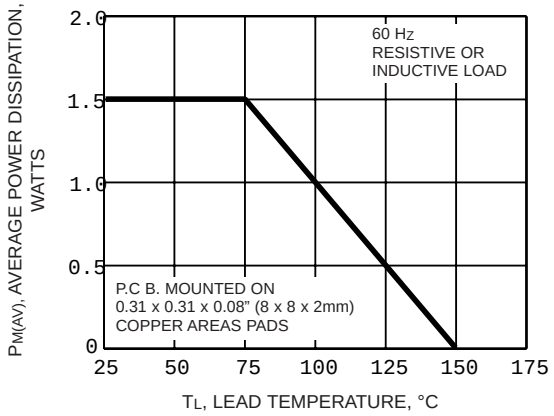


FIG. 2 - TYPICAL ZENER IMPEDANCE

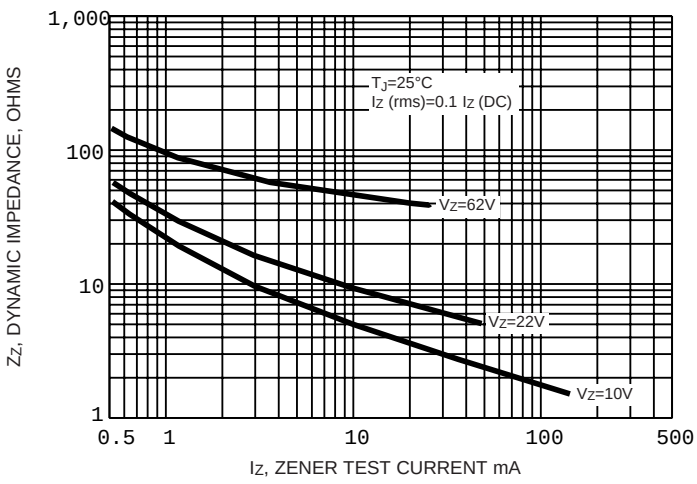


FIG. 3 - TYPICAL ZENER IMPEDANCE

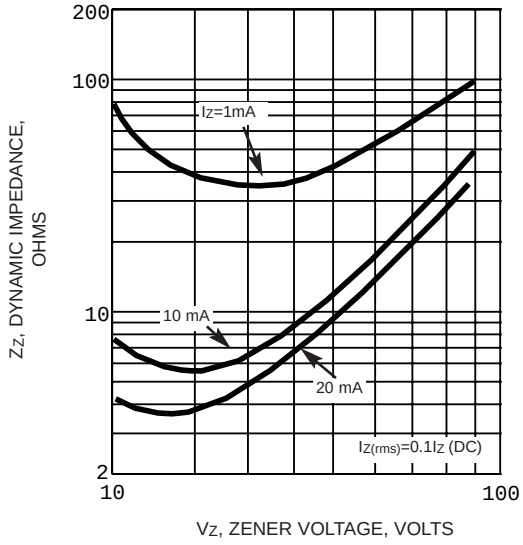
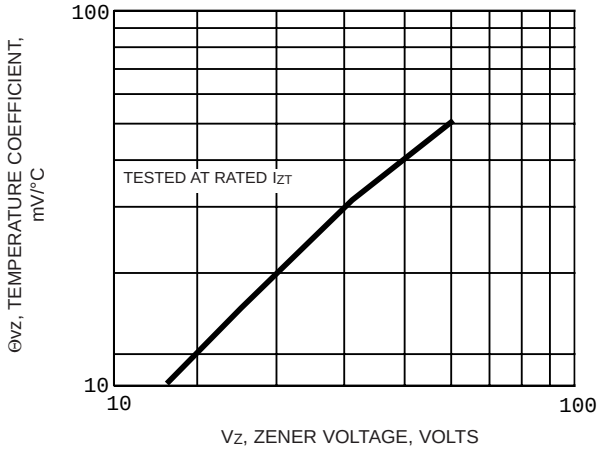


FIG. 4 - TYPICAL TEMPERATURE COEFFICIENTS



GENERAL SEMICONDUCTOR®