



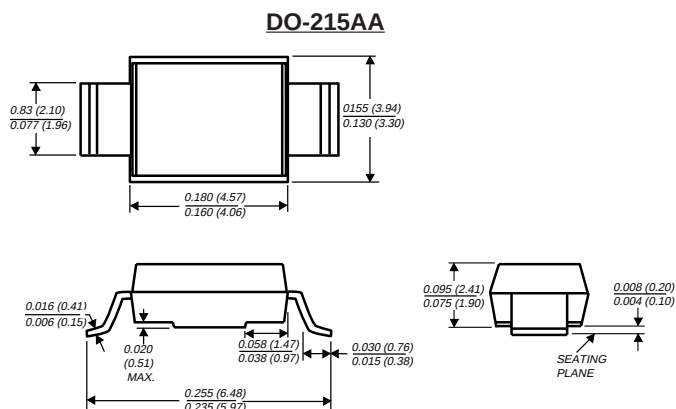
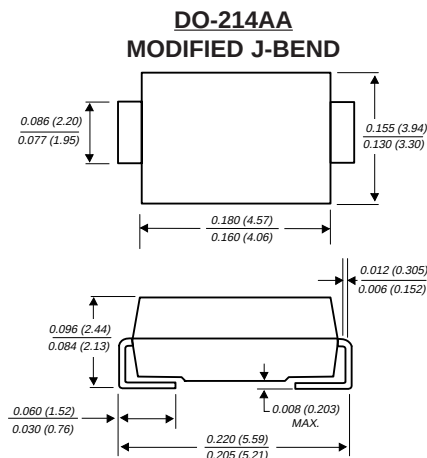
SMZG AND SMZJ 3789 THRU 3809B



SURFACE MOUNT ZENER DIODE

Zener Voltage -10 to 68 Volts

Steady State Power - 1.5 Watts



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 Vz at IzT (Volts)	TEST CURRENT IzT (mA)	MAX. ZENER IMPEDANCE			MAX. REVERSE LEAKAGE CURRENT Ir at Vr		MAX. ZENER CURRENT IzM (mA)
GULL-WING	MODIFIED J-BEND				ZzT at IzT	Zzk at Izk		(μA)	(Volts)	
					(Ohms)	(Ohms)	(mA)			
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)

RATINGS AND CHARACTERISTIC CURVES SMZG,J3789 THRU SMZG,J3809B

FIG. 1 - MAXIMUM CONTINUOUS POWER DISSIPATION

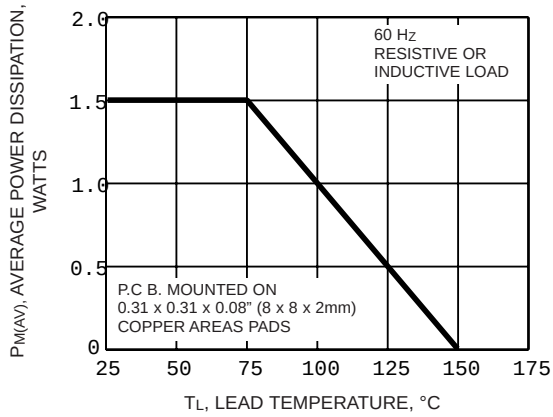


FIG. 2 - TYPICAL ZENER IMPEDANCE

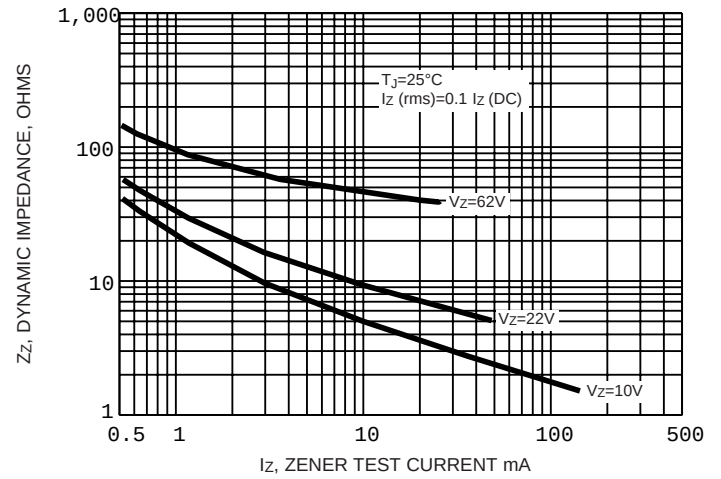


FIG. 3 - TYPICAL ZENER IMPEDANCE

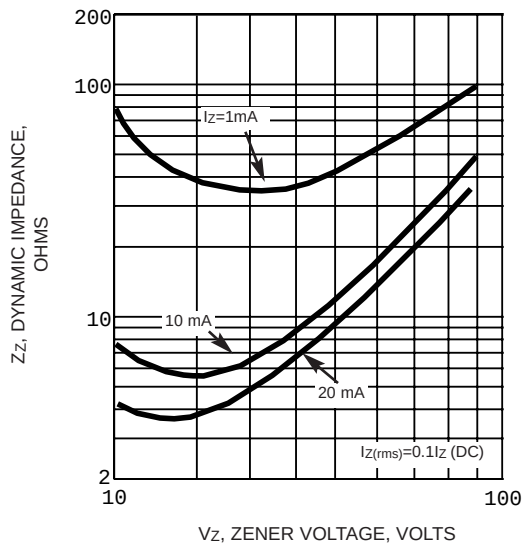


FIG. 4 - TYPICAL TEMPERATURE COEFFICIENTS

