

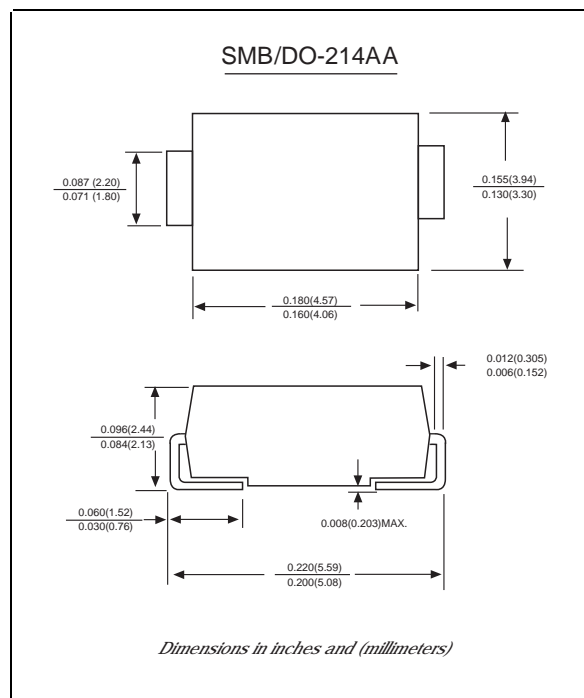
1SMB2EZ6.8~1SMB2EZ51 2000mW Zener Diodes

Features

- ◆ Low zener impedance
- ◆ Low regulation factor
- ◆ Glass passivated junction
- ◆ High temperature soldering guaranteed:
260°C/10 seconds at terminals

Mechanical Data

Case: JEDEC DO-214AA molded glass body
 Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
 Polarity: Color band denotes cathode end
 Mounting Position: Any
 Weight: 0.003 ounce, 0.093 grams



Maximum Ratings And Electrical Characteristics

Ratings at 25 C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Units
Peak Pulse Power Dissipation on $T_L=50^\circ\text{C}$ (Notes A) Derate above 50°C	P_D	2	Watts
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	15	Amps
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to + 150	$^\circ\text{C}$

NOTES:

- Mounted on 5.0mm² (.013mm thick) land areas.
- Measured on 8.3ms, and single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum.
- Tolerance and Type Number Designation. The type numbers listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.

Electrical Characteristics (at T_A = 25°C unless otherwise noted)

Part Number	Nominal Zener Voltage			Maximum Zener Impedance				Max. Reverse Leakage Current		Marking Code
	V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}	I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R @ V _R		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
2.0 watt Zener Diodes										
1SMB2EZ6.8	6.8	6.46	7.14	2	73.5	700	1	5	4	2006
1SMB2EZ7.5	7.5	7.13	7.88	2	66.5	700	0.5	5	5	2007
1SMB2EZ8.2	8.2	7.79	8.61	2	61	700	0.5	5	6	2008
1SMB2EZ8.7	8.7	8.27	9.14	2	58	700	0.5	4	6.6	20A8
1SMB2EZ9.1	9.1	8.65	9.56	3	55	700	0.5	3	7	2009
1SMB2EZ10	10	9.5	10.5	4	50	700	0.25	3	7.6	2010
1SMB2EZ11	11	10.45	11.55	4	45.5	700	0.25	1	8.4	2011
1SMB2EZ12	12	11.4	12.6	5	41.5	700	0.25	1	9.1	2012
1SMB2EZ13	13	12.35	13.65	5	38.5	700	0.25	0.5	9.9	2013
1SMB2EZ14	14	13.3	14.7	6	35.7	700	0.25	0.5	10.6	2014
1SMB2EZ15	15	14.25	15.75	7	33.4	700	0.25	0.5	11.4	2015
1SMB2EZ16	16	15.2	16.8	8	31.2	700	0.25	0.5	12.2	2016
1SMB2EZ17	17	16.15	17.85	9	29.4	750	0.25	0.5	13	2017
1SMB2EZ18	18	17.1	18.9	10	27.8	750	0.25	0.5	13.7	2018
1SMB2EZ19	19	18.05	19.95	11	26.3	750	0.25	0.5	14.4	2019
1SMB2EZ20	20	19	21	11	25	750	0.25	0.5	15.2	2020
1SMB2EZ22	22	20.9	23.1	12	22.8	750	0.25	0.5	16.7	2022
1SMB2EZ24	24	22.8	25.2	13	20.8	750	0.25	0.5	18.2	2024
1SMB2EZ25	25	23.75	26.25	14	20	750	0.25	0.5	19	2025
1SMB2EZ27	27	25.65	28.35	18	18.5	750	0.25	0.5	20.6	2027
1SMB2EZ28	28	26.6	29.4	18	17	750	0.25	0.5	21.3	2028
1SMB2EZ30	30	28.5	31.5	20	16.6	1000	0.25	0.5	22.5	2030
1SMB2EZ33	33	31.35	34.65	23	15.1	1000	0.25	0.5	25.1	2033
1SMB2EZ36	36	34.2	37.8	25	13.9	1000	0.25	0.5	27.4	2036
1SMB2EZ39	39	37.05	40.95	30	12.8	1000	0.25	0.5	29.7	2039
1SMB2EZ43	43	40.85	45.15	35	11.6	1500	0.25	0.5	32.7	2043
1SMB2EZ47	47	44.65	49.35	40	10.6	1500	0.25	0.5	35.8	2047
1SMB2EZ51	51	48.45	53.55	48	9.8	1500	0.25	0.5	38.8	2051