



**V<sub>z</sub> : 6.8 - 200 Volts**  
**P<sub>D</sub> : 10 Watts**

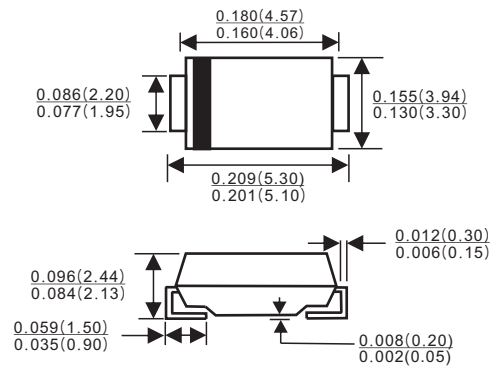
### Features

- ◇ ZENER impedance at low current is small
- ◇ High reliability
- ◇ High temperature soldering guaranteed:  
250°C / 10S
- ◇ Pb/RoHS Free

### Mechanical Data

- ◇ Case: Molded plastic
- ◇ Epoxy: UL94V-0 rate flame retardant
- ◇ Polarity: Color band denotes cathode
- ◇ Mounting position: Any
- ◇ Weight : 0.093 gram

### SMB/DO-214AA



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Dimensions in inches and (millimeters)

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

	SYMBOL	VALUE	UNIT
Zener current (see Table "Characteristics")			
Power Dissipation(Note1)	P <sub>t</sub>	10.0	W
Thermal Resistances ( Junction to Ambient ,Note1)	R <sub>θ (ja)</sub>	20	°C /W
Junction temperature	T <sub>J</sub>	-55---+150	°C
Storage temperature range	T <sub>s</sub>	-55---+175	°C

NOTES: Valid provided that leads are kept at ambient temperature at a distance of .375" (9.5mm) from case.



ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

JEDEC TYPE NO.	NOMINAL ZENER VOLTAGE Vz @ I <sub>ZT</sub> Volts	ZENER TEST CURRENT (I <sub>ZT</sub> ) mA	MAX. DYNAMIC IMPEDANCE		MAX. DC ZENER CURRENT (I <sub>ZM</sub> ) @ 75°C Stud Temp. (Note 4) mA	TYPICAL TEMP. COEFF. α <sub>vz</sub> %/°C	MAX** REVERSE CURRENT	
			Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ 1mA (I <sub>ZK</sub> )			I <sub>R</sub> @	V <sub>R</sub> Volts
10W6V8	6.8	370	1.2	500	1320	.040	150	5.2
10W7V5	7.5	335	1.3	250	1180	.045	100	5.7
10W8V2	8.2	305	1.5	250	1040	.048	50	6.2
10W9V1	9.1	275	2.0	250	960	.051	25	6.9
10W10	10	250	3	250	860	.055	25	7.6
10W11	11	230	3	250	780	.060	10	8.4
10W12	12	210	3	250	720	.065	10	9.1
10W13	13	190	3	250	660	.065	10	9.9
10W14	14	180	3	250	600	.070	10	10.5
10W15	15	170	3	250	560	.070	10	11.4
10W16	16	155	4	250	530	.070	10	12.2
10W17	17	145	4	250	500	.075	10	13.0
10W18	18	140	4	250	460	.075	10	13.7
10W19	19	130	4	250	440	.075	10	14.0
10W20	20	125	4	250	420	.075	10	15.2
10W22	22	115	5	250	380	.080	10	16.7
10W24	24	105	5	250	350	.080	10	18.2
10W25	25	100	6	250	310	.080	10	18.2
10W27	27	95	7	250	300	.085	10	20.6
10W30	30	85	8	300	280	.085	10	22.8
10W33	33	75	9	300	260	.085	10	25.1
10W36	36	70	10	300	230	.085	10	27.4
10W39	39	65	11	300	210	.090	10	29.7
10W43	43	60	12	400	195	.090	10	32.7
10W45	45	55	13	400	185	.090	10	33.0
10W47	47	55	14	400	175	.090	10	35.8
10W50	50	50	15	500	165	.090	10	36.0
10W51	51	50	15	500	160	.090	10	38.8
10W52	52	50	15	500	160	.090	10	39.0
10W56	56	45	16	500	150	.090	10	42.6
10W62	62	40	17	600	130	.090	10	47.1
10W68	68	37	18	600	120	.090	10	51.7
10W75	75	33	22	600	110	.090	10	56.0
10W82	82	30	25	700	100	.090	10	62.2
10W91	91	28	35	800	85	.090	10	69.2
10W100	100	25	40	900	80	.090	10	76.0
10W105	105	25	45	1000	75	.095	10	76.0
10W110	110	23	55	1100	72	.095	10	83.6
10W120	120	20	75	1200	67	.095	10	91.2
10W130	130	19	100	1300	62	.095	10	98.8
10W140	140	18	125	1400	58	.095	10	100.0
10W150	150	17	175	1500	54	.095	10	114.0
10W160	160	16	200	1600	50	.095	10	121.6
10W175	175	14	250	1750	46	.095	10	135.0
10W180	180	14	260	1850	45	.095	10	136.8
10W200	200	12	300	2000	40	.100	10	152.0

Notes :

(1) Standard voltage tolerance is ± 5%.

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMB	3000/REEL	48000	36X35.8X36.5	12.00	11.00