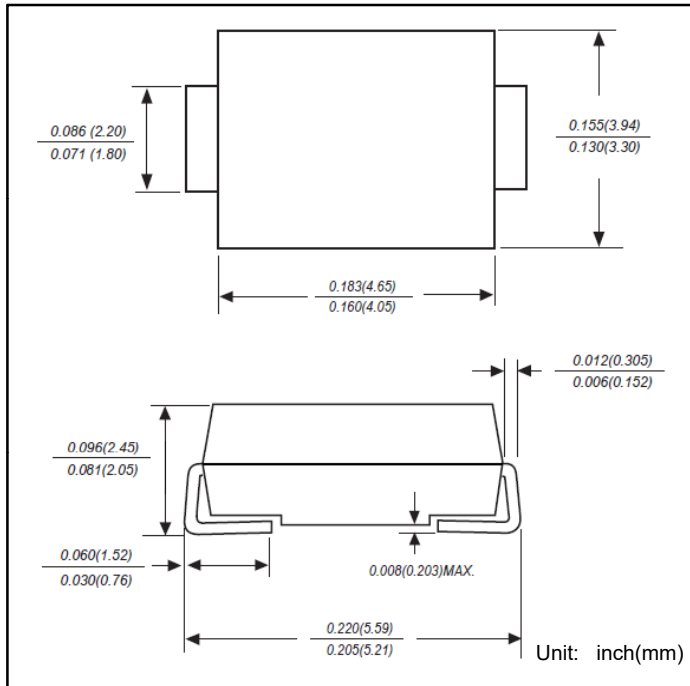


Surface Mount Silicon Zener Diodes  
 Zener Voltage 3.3 ~ 200 V  
 1.0 Watt Power Dissipation

## DO214AA(SMB)



### Features

- Glass passivated chip
- Built-in strain relief
- Low inductance
- High peak reverse power dissipation
- Low reverse leakage
- For use in stabilizing and clipping with high power rating
- RoHS compliant

### Mechanical Data

- Case: DO214AA Molded plastic
- Lead: Solderable per MIL-STD-750, method 2026
- Epoxy: UL 94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Mounting position: Any

Parameter	Symbols	Value	Unit
DC Power dissipation at TL = 75 °C <sup>(1)</sup>	P <sub>D</sub>	1.0	W
Maximum forward voltage at if=200mA	V <sub>F</sub>	1.2	V
Junction temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C
Storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

Note :

( 1 ) T<sub>L</sub>=Lead temperature at 3/8" (9.5mm)from body



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

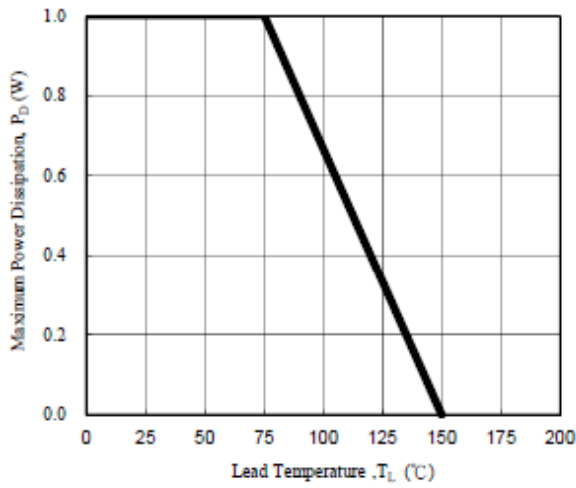


Fig. 1 - Power Temperature Derating Curve

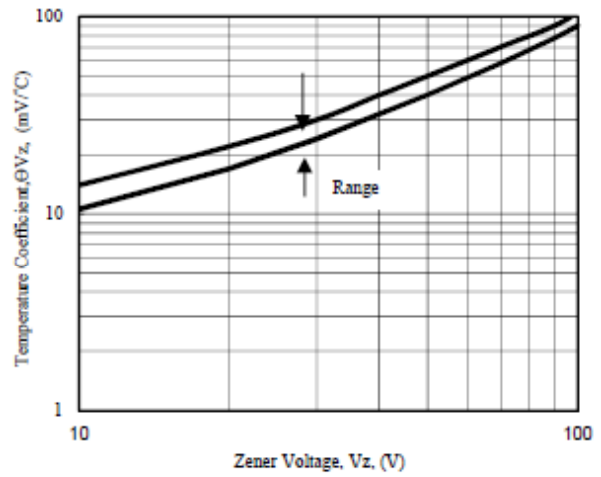


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

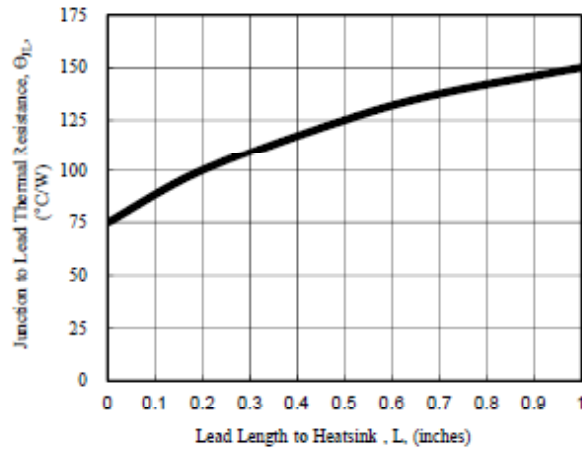


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

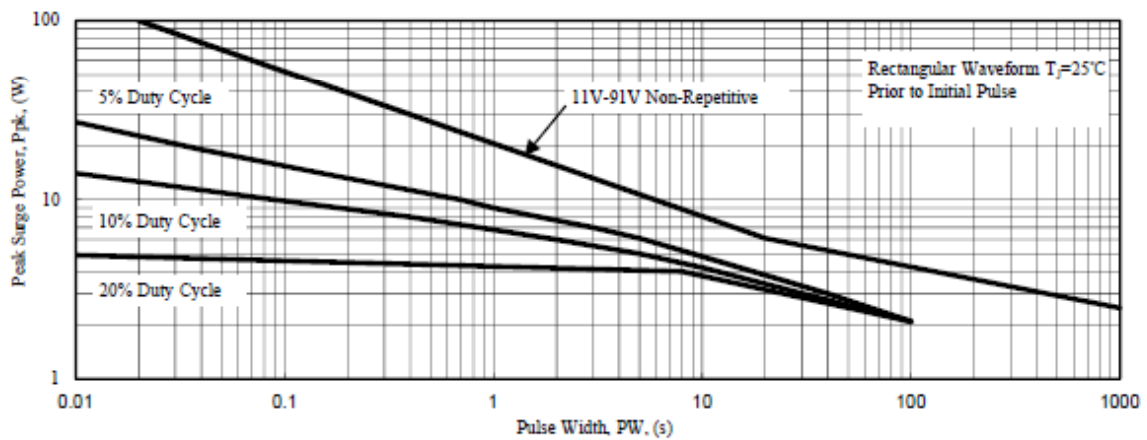


Fig. 4 - Maximum Surge Power





# SMB47xxA SERIES

Part Number	Device Marking Code	Nominal Zener Voltage @I <sub>T</sub>			I <sub>ZT</sub> (mA)	Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
		V <sub>Z AVE.</sub> (V)	V <sub>Z MIN.</sub> (V)	V <sub>Z MAX.</sub> (V)		Z <sub>ZT MAX.</sub> (Ω) @I <sub>ZT</sub>	Z <sub>ZK MAX.</sub> (Ω) @I <sub>ZK</sub>	I <sub>ZK</sub> (mA)	I <sub>R</sub> (μA)@V <sub>R</sub>	V <sub>R</sub> (V)	
SMB4728A	28A	3.3	3.14	3.47	76.0	10.0	400.0	1.00	100.0	1.0	274.0
SMB4729A	29A	3.6	3.42	3.78	69.0	10.0	400.0	1.00	100.0	1.0	251.0
SMB4730A	30A	3.9	3.71	4.10	64.0	9.0	400.0	1.00	50.0	1.0	232.0
SMB4731A	31A	4.3	4.09	4.52	58.0	9.0	400.0	1.00	10.0	1.0	210.0
SMB4732A	32A	4.7	4.47	4.94	53.0	8.0	500.0	1.00	10.0	1.0	192.0
SMB4733A	33A	5.1	4.85	5.36	49.0	7.0	550.0	1.00	10.0	1.0	177.0
SMB4734A	34A	5.6	5.32	5.88	45.0	5.0	600.0	1.00	10.0	2.0	161.0
SMB4735A	35A	6.2	5.89	6.51	41.0	2.0	700.0	1.00	10.0	3.0	146.0
SMB4736A	36A	6.8	6.46	7.14	37.0	3.5	700.0	1.00	5.0	4.0	133.0
SMB4737A	37A	7.5	7.13	7.88	34.0	4.0	700.0	0.50	5.0	5.0	121.0
SMB4738A	38A	8.2	7.79	8.61	31.0	4.5	700.0	0.50	5.0	6.0	110.0
SMB4739A	39A	9.1	8.65	9.56	28.0	5.0	700.0	0.50	0.5	7.0	100.0
SMB4740A	40A	10.0	9.50	10.50	25.0	7.0	700.0	0.25	0.5	7.6	91.0
SMB4741A	41A	11.0	10.45	11.55	23.0	8.0	700.0	0.25	0.1	8.4	83.0
SMB4742A	42A	12.0	11.40	12.60	21.0	9.0	700.0	0.25	0.1	9.1	76.0
SMB4743A	43A	13.0	12.35	13.65	19.0	10.0	700.0	0.25	0.1	9.9	69.0
SMB4744A	44A	15.0	14.25	15.75	17.0	14.0	700.0	0.25	0.1	11.4	61.0
SMB4745A	45A	16.0	15.20	16.80	15.5	16.0	700.0	0.25	0.1	12.2	57.0
SMB4746A	46A	18.0	17.10	18.90	14.0	20.0	750.0	0.25	0.1	13.7	50.0
SMB4747A	47A	20.0	19.00	21.00	12.5	22.0	750.0	0.25	0.1	15.2	45.0
SMB4748A	48A	22.0	20.90	23.10	11.5	23.0	750.0	0.25	0.1	16.7	41.0
SMB4749A	49A	24.0	22.80	25.20	10.5	25.0	750.0	0.25	0.1	18.2	38.0
SMB4750A	50A	27.0	25.65	28.35	9.5	35.0	750.0	0.25	0.1	20.6	34.0
SMB4751A	51A	30.0	28.50	31.50	8.5	40.0	1000.0	0.25	0.1	22.8	30.0
SMB4752A	52A	33.0	31.35	34.65	7.5	45.0	1000.0	0.25	0.1	25.1	27.0
SMB4753A	53A	36.0	34.20	37.80	7.0	50.0	1000.0	0.25	0.1	27.4	25.0
SMB4754A	54A	39.0	37.05	40.95	6.5	60.0	1000.0	0.25	0.1	29.7	23.0
SMB4755A	55A	43.0	40.85	45.15	6.0	70.0	1500.0	0.25	0.1	32.7	22.0
SMB4756A	56A	47.0	44.65	49.35	5.5	80.0	1500.0	0.25	0.1	35.8	19.0
SMB4757A	57A	51.0	48.45	53.55	5.0	95.0	1500.0	0.25	0.1	38.8	18.0
SMB4758A	58A	56.0	53.20	58.80	4.5	110.0	2000.0	0.25	0.1	42.6	16.0
SMB4759A	59A	62.0	58.90	65.10	4.0	125.0	2000.0	0.25	0.1	47.1	14.0
SMB4760A	60A	68.0	64.60	71.40	3.7	150.0	2000.0	0.25	0.1	51.7	13.0
SMB4761A	61A	75.0	71.25	78.75	3.3	175.0	2000.0	0.25	0.1	56.0	12.0
SMB4762A	62A	82.0	77.90	86.10	3.0	200.0	3000.0	0.25	0.1	62.2	11.0
SMB4763A	63A	91.0	86.45	95.55	2.8	250.0	3000.0	0.25	0.1	69.2	10.0
SMB4764A	64A	100.0	95.00	105.00	2.5	350.0	3000.0	0.25	0.1	76.0	9.0
SMB1110A	11Z	110.0	104.50	115.50	2.3	450.0	4000.0	0.25	0.1	83.6	8.6
SMB1120A	12Z	120.0	114.00	126.00	2.0	550.0	4500.0	0.25	0.1	91.2	7.8
SMB1130A	13Z	130.0	123.50	136.50	1.9	700.0	5000.0	0.25	0.1	98.8	7.0
SMB1150A	15Z	150.0	142.50	157.50	1.7	1000.0	6000.0	0.25	0.1	114.0	6.4
SMB1160A	16Z	160.0	152.00	168.00	1.6	1100.0	6500.0	0.25	0.1	121.6	5.8
SMB1180A	18Z	180.0	171.00	189.00	1.4	1200.0	7000.0	0.25	0.1	136.8	5.2
SMB1200A	20Z	200.0	190.00	210.00	1.2	1900.0	9990.0	0.25	0.1	152.0	4.7

