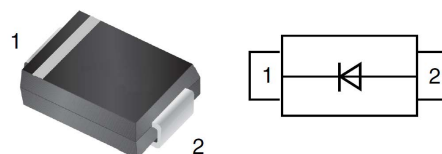


Surface Mount Silicon Zener Diodes in DO-214AA/SMB

Features

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Mechanical Data

- Case:**
- Molding Compound Flammability Rating:**
- Terminals:**

Absolute Maximum Ratings

Ratings at 25°ambient temperature unless otherwise specified.

Parameter	Symbol	Value	UNIT
DC power dissipation at $T_L = 50\text{ }^\circ\text{C}^{(1)}$	P_D	3.0	W
Maximum forward voltage at $I_F = 200\text{ mA}$	V_F	1.5	V
Junction temperature range	T_J	- 55 to + 150	$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 to + 150	$^\circ\text{C}$

Note:

(1) T_L = Lead temperature at 3/8 " (9.5mm) from body

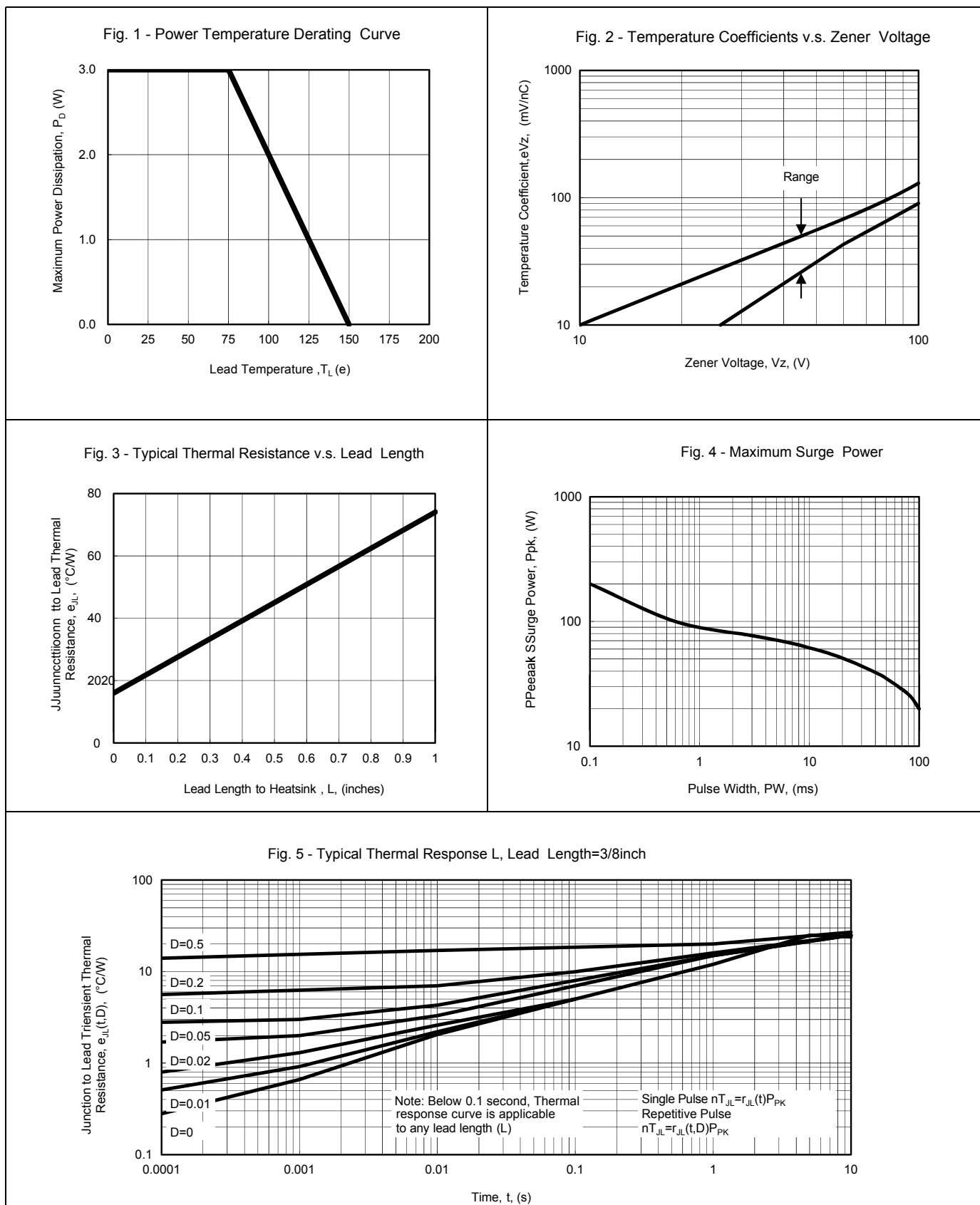
Typical Characteristics (T_{amb} = 25 °C unless otherwise specified)

Part Number	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	V _Z @ I _{ZT}	I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R @ V _R		I _{ZM}
	(V)	(mA)	(Ω)	(Ω)	(mA)	(BA)	(V)	(mA)
SMBZ5913B	3.3	113.6	10.0	500	1.00	100.0	1.0	454
SMBZ5914B	3.6	104.2	9.0	500	1.00	75.0	1.0	416
SMBZ5915B	3.9	96.1	7.5	500	1.00	25.0	1.0	384
SMBZ5916B	4.3	87.2	6.0	500	1.00	5.0	1.0	348
SMBZ5917B	4.7	79.8	5.0	500	1.00	5.0	1.5	319
SMBZ5918B	5.1	73.5	4.0	350	1.00	5.0	2.0	294
SMBZ5919B	5.6	66.9	2.0	250	1.00	5.0	3.0	267
SMBZ5920B	6.2	60.5	2.0	200	1.00	2.5	4.0	240
SMBZ5921B	6.8	55.1	2.5	200	1.00	2.5	5.2	220
SMBZ5922B	7.5	50.0	3.0	400	0.50	2.5	6.0	200
SMBZ5923B	8.2	45.7	3.5	400	0.50	2.5	6.5	182
SMBZ5924B	9.1	41.2	4.0	500	0.50	2.5	7.0	164
SMBZ5925B	10.0	37.5	4.5	500	0.25	2.5	8.0	150
SMBZ5926B	11.0	34.1	5.5	550	0.25	0.5	8.4	136
SMBZ5927B	12.0	31.2	6.5	550	0.25	0.5	9.1	125
SMBZ5928B	13.0	28.8	7.0	550	0.25	0.5	9.9	115
SMBZ5929B	15.0	25.0	9.0	600	0.25	0.5	11.4	100
SMBZ5930B	16.0	23.4	10.0	600	0.25	0.5	12.2	93
SMBZ5931B	18.0	20.8	12.0	650	0.25	0.5	13.7	83
SMBZ5932B	20.0	18.7	14.0	650	0.25	0.5	15.2	75
SMBZ5933B	22.0	17.0	17.5	650	0.25	0.5	16.7	68
SMBZ5934B	24.0	15.6	19.0	700	0.25	0.5	18.2	62
SMBZ5935B	27.0	13.9	23.0	700	0.25	0.5	20.6	55
SMBZ5936B	30.0	12.5	26.0	750	0.25	0.5	22.8	50
SMBZ5937B	33.0	11.4	33.0	800	0.25	0.5	25.1	45
SMBZ5938B	36.0	10.4	38.0	850	0.25	0.5	27.4	41
SMBZ5939B	39.0	9.6	45.0	900	0.25	0.5	29.7	38
SMBZ5940B	43.0	8.7	53.0	950	0.25	0.5	32.7	34
SMBZ5941B	47.0	8.0	67.0	1000	0.25	0.5	35.8	31
SMBZ5942B	51.0	7.3	70.0	1100	0.25	0.5	38.8	29
SMBZ5943B	56.0	6.7	86.0	1300	0.25	0.5	42.6	26
SMBZ5944B	62.0	6.0	100.0	1500	0.25	0.5	47.1	24
SMBZ5945B	68.0	5.5	120.0	1700	0.25	0.5	51.7	22
SMBZ5946B	75.0	5.0	140.0	2000	0.25	0.5	56.0	20
SMBZ5947B	82.0	4.6	160.0	2500	0.25	0.5	62.2	18
SMBZ5948B	91.0	4.1	200.0	3000	0.25	0.5	69.2	16
SMBZ5949B	100.0	3.7	250.0	3100	0.25	0.5	76.0	15
SMBZ5950B	110.0	3.4	300.0	4000	0.25	0.5	83.6	13
SMBZ5951B	120.0	3.1	380.0	4500	0.25	0.5	91.2	12
SMBZ5952B	130.0	2.9	450.0	5000	0.25	0.5	98.8	11
SMBZ5953B	150.0	2.5	600.0	6000	0.25	0.5	114.0	10
SMBZ5954B	160.0	2.3	700.0	6500	0.25	0.5	121.6	9
SMBZ5955B	180.0	2.1	900.0	7000	0.25	0.5	136.8	8
SMBZ5956B	200.0	1.9	1200.0	8000	0.25	0.5	152.0	7

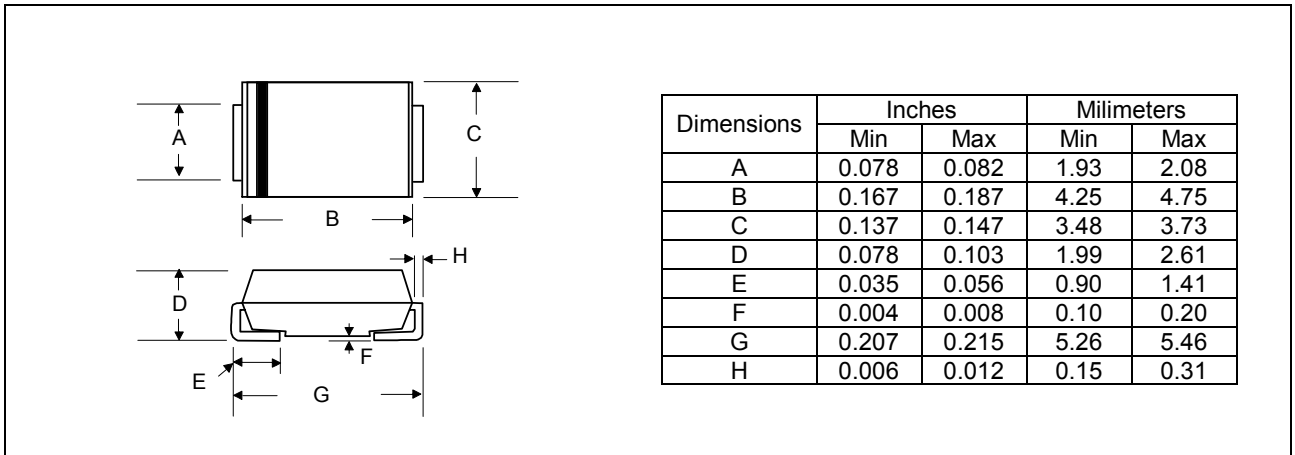
Notes :

- (1) The type number listed have a standard tolerance on the nominal zener voltage of ± 5 %
- (2) The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on I_{ZT} per method.

Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
SMBZ59xxB	DO-214AA/SMB	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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