

1SMA4738A thru 1SMA4764A

Surface Mount Zener Diodes

Vz Range:8.2 to 100V Power Dissipation:1W

Electrical Characteristics (T_A=25°C unless otherwise specified)

Part number	Device Marking Code	Nominal Zener Voltage at I _{ZT} V _Z (Volts) ⁽¹⁾	Test Current I _{ZT} (mA)	Maximum Zener Impedance ⁽²⁾			Maximum Reverse Leakage Current		Maximum Surge Current ⁽³⁾ I _{RM} (mApk)	Maximum Regulator Current ⁽⁴⁾ at T _A =50°C I _{ZM} (mA)
				Z _{ZT} at I _{ZT} (Ω)	Z _{ZK} (Ω)	At I _{ZK} (mA)	I _R (uA)	at V _R (Volts)		
1SMA4750A	4750A	27	9.5	35	750	0.25	5	20.6	170	34
1SMA4751A	4751A	30	8.5	40	1000	0.25	5	22.8	150	30
1SMA4752A	4752A	33	7.5	45	1000	0.25	5	25.1	135	27
1SMA4753A	4553A	36	7.0	50	1000	0.25	5	27.4	125	25
1SMA4754A	4754A	39	6.5	60	1000	0.25	5	29.7	115	23
1SMA4755A	4755A	43	6.0	70	1500	0.25	5	32.7	110	22
1SMA4756A	4756A	47	5.5	80	1500	0.25	5	35.8	95	19
1SMA4757A	4757A	51	5.0	95	1500	0.25	5	38.8	90	18
1SMA4758A	4758A	56	4.5	110	2000	0.25	5	42.6	80	16
1SMA4759A	4759A	62	4.0	125	2000	0.25	5	47.1	70	14
1SMA4760A	4760A	68	3.7	150	2000	0.25	5	51.7	65	13
1SMA4761A	4761A	75	3.3	175	2000	0.25	5	56.0	60	12
1SMA4762A	4762A	82	3.0	200	3000	0.25	5	62.2	55	11
1SMA4763A	4763A	91	2.8	250	3000	0.25	5	69.2	50	10
1SMA4764A	4764A	100	2.5	350	3000	0.25	5	76	45	9

Notes: (1) Measured under thermal equilibrium and DC test conditions , Standard voltage tolerance is 10%, suffix A±5%.

(2) The Zener impedance is derived from the 1KHZ AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK}. Zener impedance is measure at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

(3) Maximum surge current: Surge current is a non-repetitive,8.3ms pulse width square wave or equivalent sine-wave superimposed on I_{ZT} per JEDEC method.

(4) Valid provided that electrodes at a distance of 10 mm from case are kept at ambient temperature.

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Ratings and Characteristic Curves (at 25°C unless otherwise specified)

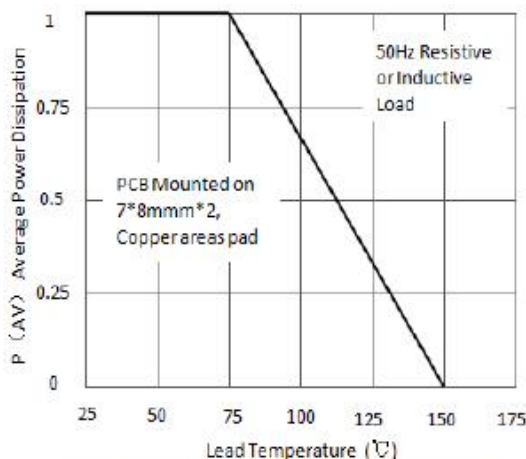


Fig.1 Maximum Continuous Power Dissipation

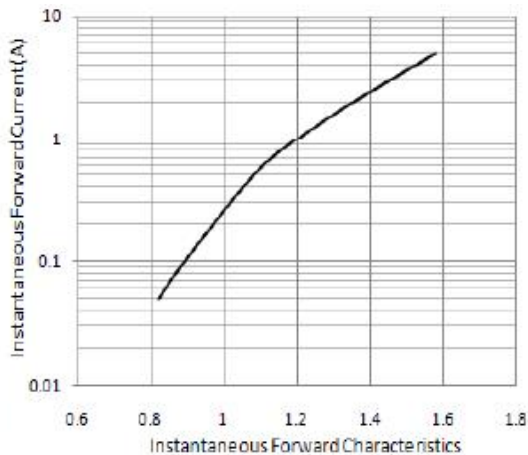


Fig.2 Typical Instantaneous Forward Characteristics

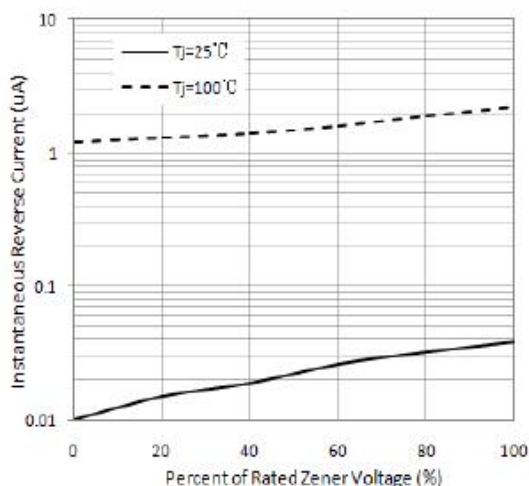


Fig.3 Typical Reverse Characteristics

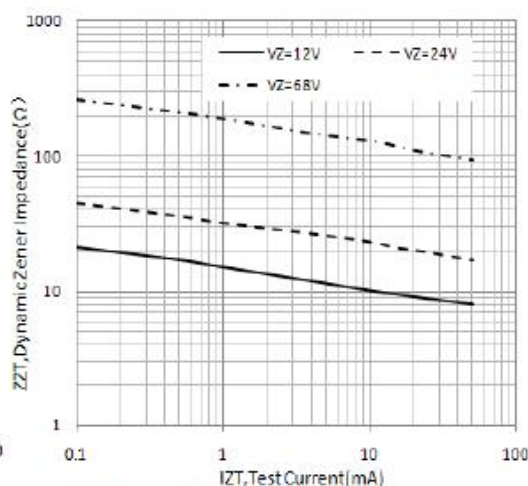


Fig.4 Typical Zener Impedance

Package Outline Dimensions

SMA in inches(millimeters)

