



DESCRIPTION

The 1SMA5913-1SMA5957 are available in SMA package.

FEATURE

- Total Power Dissipation: Max. 1.5W.
- Wide Zener Reverse Voltage Range 3.3V to 240V
- Small Plastic Package Suitable for Surface Mounted Design.

ORDERING INFORMATION

Package Type	Part Number	
SMA	1SMA5913	1SMA5935
	1SMA5914	1SMA5936
	1SMA5915	1SMA5937
	1SMA5916	1SMA5938
	1SMA5917	1SMA5940
	1SMA5918	1SMA5941
	1SMA5919	1SMA5942
	1SMA5920	1SMA5943
	1SMA5921	1SMA5944
	1SMA5922	1SMA5945
	1SMA5923	1SMA5946
	1SMA5924	1SMA5947
	1SMA5925	1SMA5948
	1SMA5926	1SMA5949
	1SMA5927	1SMA5950
	1SMA5928	1SMA5951
	1SMA5929	1SMA5952
	1SMA5930	1SMA5953
	1SMA5931	1SMA5954
	1SMA5932	1SMA5955
1SMA5933	1SMA5956	
1SMA5934	1SMA5957	
Note	SPQ: 3,000pcs/Reel	
AiT provides all RoHS Compliant Products		

MECHANICAL DATA

- Case: SMA
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 55mg / 0.002oz

PIN DESCRIPTION



SMA Package



PIN#	DESCRIPTION
1	CATHODE
2	ANODE



ABSOLUTE MAXIMUM RATINGS

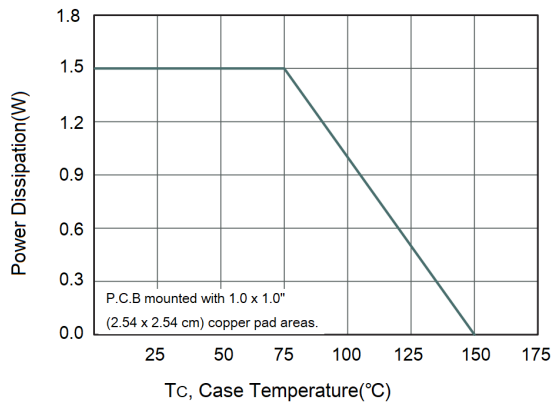
$T_a = 25^\circ\text{C}$, unless otherwise noted.

P_D , Power Dissipation at $T_L=75^\circ\text{C}$	1.5W
V_F , Forward Voltage at $I_F=200\text{mA}$	1.5V
T_J , Junction Temperature Range	$-55^\circ\text{C} \sim +150^\circ\text{C}$
T_S , Storage Temperature Range	$-55^\circ\text{C} \sim +150^\circ\text{C}$

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Maximum Continuous Power Derating





ELECTRICAL CHARACTERISTICS

T_a = 25°C, unless otherwise noted.

Part Number	Zener Voltage Range				Dynamic Impedance	Reverse Current		Admissible Zener Current
	V _{ZT} (at I _{ZT})			at I _{ZT}	Z _{ZT} (at I _{ZT})	I _R	at V _R	I _{ZM} (mA)
	Min.(V)	NOM(V)	Max.(V)	(mA)	Max.(Ω)	Max(μA)	(V)	
1SMA5913	3.13	3.30	3.47	113.60	10	100	1	454
1SMA5914	3.42	3.60	3.78	104.20	9	75	1	416
1SMA5915	3.70	3.90	4.10	96.10	7.50	25	1	384
1SMA5916	4.08	4.30	4.52	87.20	6	5	1	348
1SMA5917	4.46	4.70	4.94	79.80	5	5	1.50	319
1SMA5918	4.84	5.10	5.36	73.50	4	5	2	294
1SMA5919	5.32	5.60	5.88	66.90	2	5	3	267
1SMA5920	5.89	6.20	6.51	60.50	2	5	4	241
1SMA5921	6.46	6.80	7.14	55	2.50	5	5.20	220
1SMA5922	7.12	7.50	7.88	50	3	5	6	200
1SMA5923	7.79	8.20	8.61	45.70	3.50	5	6.50	182
1SMA5924	8.60	9.10	9.56	41.20	4	5	7	164
1SMA5925	9.50	10	10.50	37.50	4.50	5	8	150
1SMA5926	10.40	11	11.60	34	5.50	1	8.40	136
1SMA5927	11.40	12	12.60	31.20	6.50	1	9	125
1SMA5928	12.35	13	14.10	28.80	7	1	9.90	115
1SMA5929	13.80	15	15.80	25	9	1	11.40	100
1SMA5930	15.20	16	16.80	23.40	10	1	12.20	96
1SMA5931	16.80	18	19.20	21	12	1	13.70	86
1SMA5932	19.00	20	21.20	19	14	1	15.20	75
1SMA5933	20.80	22	23.30	17	18	1	16.70	68
1SMA5934	22.80	24	25.20	16	19	1	18.20	62
1SMA5935	25.30	27	28.90	14	23	1	20.60	55
1SMA5936	28.20	30	32.00	12.50	26	1	23	50
1SMA5937	31.30	33	34.90	11.40	33	1	25	45
1SMA5938	34.20	36	37.90	10.40	38	1	27	41
1SMA5939	37.20	39	41.50	9.60	45	1	30	38
1SMA5940	40.90	43	45.60	8.70	53	1	33	34

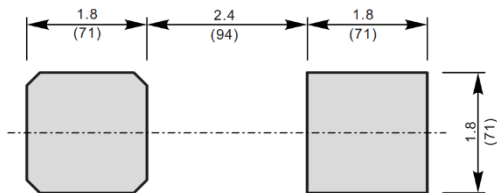
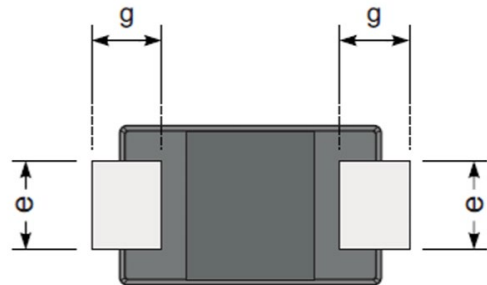
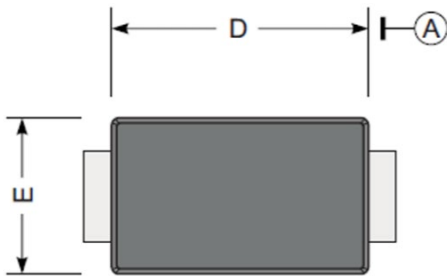
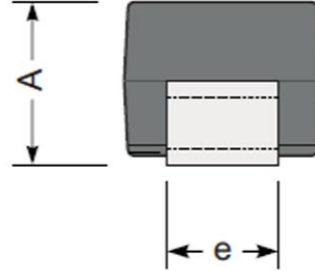
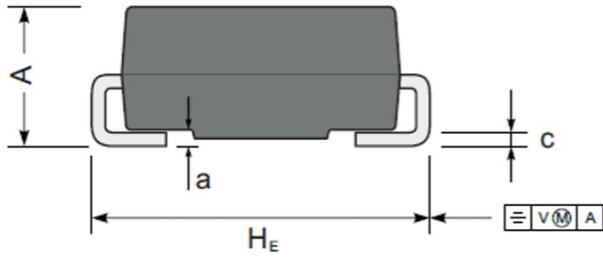


Part Number	Zener Voltage Range				Dynamic Impedance	Reverse Current		R Admissible Zener Current
	V _{ZT} (at I _{ZT})			at I _{ZT}	Z _{ZT} (at I _{ZT})	I _R	at V _R	I _{ZM} (mA)
	Min.(V)	NOM(V)	Max.(V)	(mA)	Max.(Ω)	Max(μA)	(V)	
1SMA5941	44.9	47	49.80	8	67	1	36	31
1SMA5942	48.6	51	54.00	7.30	70	1	39	29
1SMA5943	53.6	56	58.80	6.70	86	1	42	26
1SMA5944	58.9	62	65.60	6	100	1	47	24
1SMA5945	64.6	68	71.70	5.50	120	1	52	22
1SMA5946	71.2	75	78.80	5	140	1	57	20
1SMA5947	77.9	82	87.00	4.60	160	1	62	18
1SMA5948	86	91	96.00	4.10	200	1	69	16
1SMA5949	95	100	105	3.70	250	1	76	15
1SMA5950	104	110	116	3.40	300	1	84	13
1SMA5951	114	120	127	3.10	380	1	91	12
1SMA5952	125	130	142	2.90	450	1	100	11
1SMA5953	140	150	157	2.50	600	1	114	10
1SMA5954	152	160	168	2.30	700	1	121.60	9
1SMA5955	168	180	189	2.10	900	1	136.80	8
1SMA5956	189	200	211	1.90	1200	1	150	7
1SMA5957	228	240	252	1.50	1600	1	182.40	6



PACKAGE INFORMATION

Dimension in SMA Package (Unit: mm)



Unit : $\frac{\text{mm}}{\text{(mil)}}$

The recommended mounting pad size

SYMBOL	MIN	MAX
A	1.900	2.200
a	0.300	
c	0.150	0.310
D	4.000	4.500
E	2.300	2.700
e	1.300	1.600
g	0.900	1.500
HE	4.700	5.200



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