

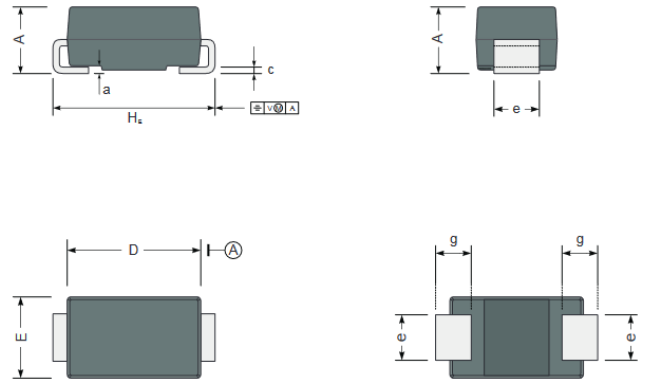
## Silicon SMD Voltage Regulator Zener Diodes

Primary characteristics		
Parameter	Value	Unit
V <sub>Z</sub> range nom.	3.3 to 330	V
Power rating	1	W

### Features

- SMA (DO-214AC) case for easy automatic insertion.
- Pb-free and RoHS compliant
- Approx. weight: 0.055g / 0.002oz

### Case dimensions



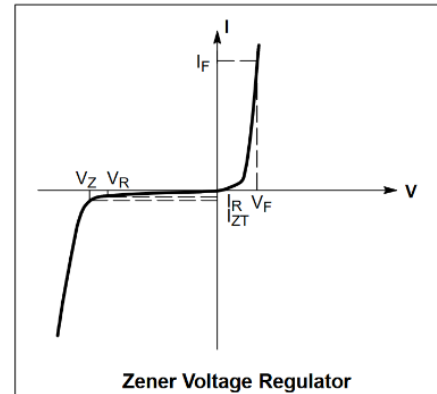
#### SMA (DO-214AC)

Unit	A	D	E	H <sub>E</sub>	c	e	g	a
mm	2.05 ±0.15	4.25 ±0.25	2.5 ±0.2	4.95 ±0.25	0.23 ±0.08	1.45 ±0.15	1.2 ±0.3	0.3

Part numbering system		
1SMA47	28	A
↓ Series code	↓ Reverse Zener Voltage Marking (see: <a href="#">Characteristics table</a> )	

Absolute maximum ratings (T <sub>a</sub> = 25°C)			
Parameter	Symbol	Value	Unit
Forward Voltage @I <sub>F</sub> =200mA	V <sub>F</sub>	1.2	V
Power Dissipation <sup>1)</sup>	P <sub>D</sub>	1	W
Junction Temperature	T <sub>J</sub>	-55 ~ 150	°C
Storage Temperature Range	T <sub>S</sub>	-55 ~ 150	°C

Parameters list	
Symbol	Parameter
$V_Z$	Reverse Zener Voltage @ $I_{ZT}$
$I_{ZT}$	Reverse Current
$I_R$	Reverse Leakage Current @ $V_R$
$V_R$	Reverse Voltage
$I_F$	Forward Current
$V_F$	Forward Voltage @ $I_F$

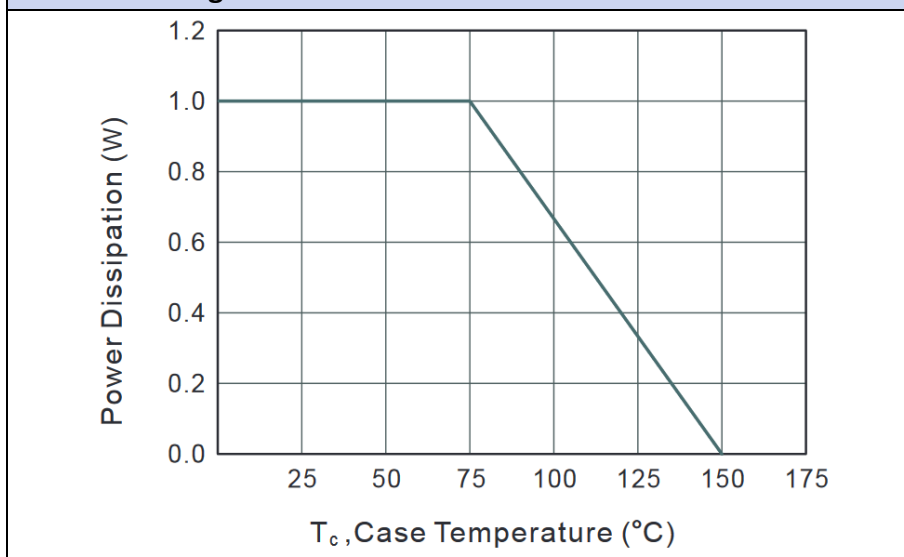


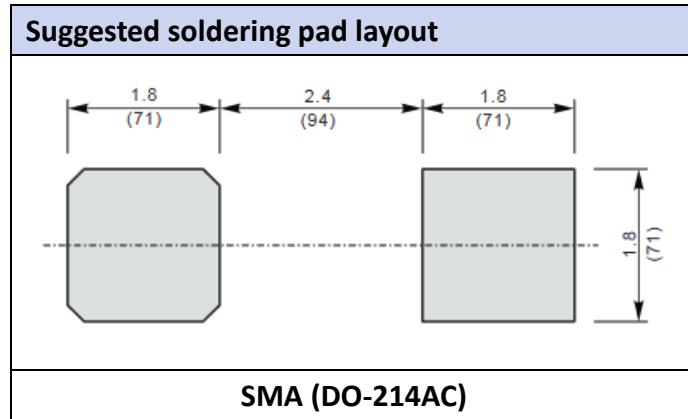
Characteristics table ( $T_a = 25^\circ\text{C}$ )								
Type	Marking Code	Zener Voltage @ $I_{ZT}=5\text{mA}$		Dynamic Resistance		Reverse Current		Admissible Zener Current
		$V_Z$ nom.	$V_{ZT}$	$r_{ZT}$ @ $I_{ZT}$		$I_R$ @ $V_R$		$I_{ZM}$
		V	V	$\Omega$	mA	$\mu\text{A}$	V	mA
1SMA4728A	28	3.3	3.10 ~ 3.50	<10	75	<100	1.0	285
1SMA4729A	29	3.6	3.40 ~ 3.80	<10	69	<100	1.0	263
1SMA4730A	30	3.9	3.70 ~ 4.10	<9.0	64	<50	1.0	243
1SMA4731A	31	4.3	4.06 ~ 4.56	<9.0	58	<25	1.0	219
1SMA4732A	32	4.7	4.50 ~ 4.93	<8.0	53	<10	1.0	203
1SMA4733A	33	5.1	4.84 ~ 5.36	<7.0	49	<10	1.0	186
1SMA4734A	34	5.6	5.32 ~ 5.92	<5.0	45	<10	2.0	170
1SMA4735A	35	6.2	5.86 ~ 6.51	<2.0	41	<10	3.0	154
1SMA4736A	36	6.8	6.46 ~ 7.18	<3.5	37	<10	4.0	140
1SMA4737A	37	7.5	7.12 ~ 7.88	<4.0	34	<10	5.0	127
1SMA4738A	38	8.2	7.79 ~ 8.67	<4.5	31	<10	6.0	116
1SMA4739A	39	9.1	8.60 ~ 9.59	<5.0	28	<10	7.0	104
1SMA4740A	40	10	9.5 ~ 10.5	<7.0	25	<10	7.0	95
1SMA4741A	41	11	10.4 ~ 11.6	<8.0	23	<5.0	8.0	86
1SMA4742A	42	12	11.4 ~ 12.6	<9.0	21	<5.0	9.0	79
1SMA4743A	43	13	12.4 ~ 14.1	<10	19	<5.0	10	71
1SMA4744A	44	15	13.8 ~ 15.8	<14	17	<5.0	11	63
1SMA4745A	45	16	15.2 ~ 17.1	<16	16	<5.0	12	58
1SMA4746A	46	18	16.8 ~ 19.2	<20	14	<5.0	13	52
1SMA4747A	47	20	19.0 ~ 21.2	<22	13	<5.0	15	47
1SMA4748A	48	22	20.8 ~ 23.3	<23	12	<5.0	17	43
1SMA4749A	49	24	22.8 ~ 26.0	<25	11	<5.0	18	38
1SMA4750A	50	27	25.3 ~ 28.9	<35	9.5	<5.0	21	35
1SMA4751A	51	30	28.2 ~ 32.0	<40	8.5	<5.0	23	31
1SMA4752A	52	33	31.3 ~ 34.9	<45	7.5	<5.0	25	28
1SMA4753A	53	36	34.2 ~ 37.9	<50	7.0	<5.0	27	26
1SMA4754A	54	39	37.2 ~ 41.5	<60	6.5	<5.0	30	24
1SMA4755A	55	43	40.9 ~ 45.6	<70	6.0	<1.0	32	22
1SMA4756A	56	47	44.9 ~ 49.8	<80	5.5	<1.0	35	20
1SMA4757A	57	51	48.6 ~ 54.0	<95	5.0	<1.0	38	18
1SMA4758A	58	56	53.6 ~ 58.8	<110	4.5	<1.0	42	17

**Characteristics table ( $T_a = 25^\circ\text{C}$ )**

Type	Marking Code	Zener Voltage @ $I_{ZT}=5\text{mA}$		Dynamic Resistance		Reverse Current		Admissible Zener Current $I_{ZM}$ mA
		$V_Z$ nom.	$V_{ZT}$	$r_{ZT}$ @ $I_{ZT}$		$I_R$ @ $V_R$		
		V	V	$\Omega$	mA	$\mu\text{A}$	V	
1SMA4759A	59	62	58.9 ~ 65.6	<125	4.0	<1.0	47	15
1SMA4760A	60	68	64.6 ~ 71.7	<150	3.7	<1.0	52	14
1SMA4761A	61	75	71.2 ~ 78.8	<175	3.3	<1.0	56	12
1SMA4762A	62	82	77.9 ~ 87.0	<200	3.0	<1.0	62	11
1SMA4763A	63	91	86 ~ 96	<250	2.8	<1.0	69	10
1SMA4764A	64	100	95 ~ 105	<350	2.5	<1.0	76	9.5
1SMA4765A	65	110	104 ~ 116	<450	2.3	<1.0	84	8.6
1SMA4766A	66	120	114 ~ 127	<550	2.0	<1.0	91	7.8
1SMA4767A	67	135	125 ~ 142	<700	1.9	<1.0	100	7.0
1SMA4768A	68	150	140 ~ 157	<900	1.7	<1.0	110	6.3
1SMA4769A	69	165	155 ~ 172	<1100	1.6	<1.0	120	5.8
1SMA4770A	70	180	170 ~ 191	<1200	1.4	<1.0	135	5.2
1SMA4771A	71	200	189 ~ 211	<1400	1.2	<1.0	150	4.7
1SMA4772A	72	220	209 ~ 231	<1600	1.0	<1.0	165	4.3
1SMA4773A	73	240	229 ~ 251	<1800	1.0	<1.0	180	3.9
1SMA4774A	74	260	249 ~ 271	<2000	1.0	<1.0	190	3.7
1SMA4775A	75	280	269 ~ 291	<2100	1.0	<1.0	205	3.4
1SMA4776A	76	300	289 ~ 315	<2300	1.0	<1.0	230	3.1
1SMA4777A	77	330	313 ~ 346	<2500	1.0	<1.0	250	2.8

**Power derating curve**





Ordering information			
Part Number	Package	Shipping Quantity	Dimensions
1SMA4728A ~ 1SMA4777A	SMA (DO-214AC)	5000 pcs / reel	---

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