



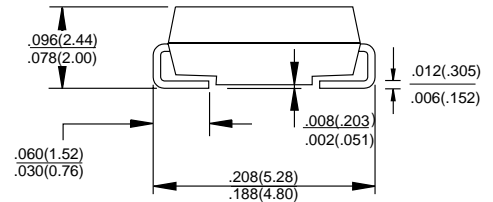
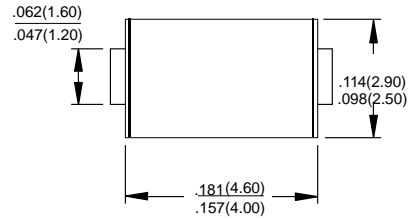
**Features**

- Glass passivated chip
- Low leakage
- Built-in strain relief
- Low inductance
- High peak reverse power dissipation
- Lead (Pb)-free component
- For use in stabilizing and clipping with high power rating
- AEC-Q101 qualified

**Mechanical data**

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

SMA/DO-214AC Unit:inch(mm)



Maximum Ratings (TA=25°C unless otherwise noted)			
Parameter	Symbol	Value	UNIT
DC Power Dissipation at T <sub>L</sub> = 75°C (Note1)	P <sub>D</sub>	1.0	W
Maximum Forward Voltage at I <sub>F</sub> = 200 mA	V <sub>F</sub>	1.2	V
Junction Temperature Range	T <sub>J</sub>	- 55 to + 150	°C
Storage Temperature Range	T <sub>STG</sub>	- 55 to + 150	°C

Note:

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

# DEVICE CHARACTERISTICS

## SMA47xxA-A Series

### 1.0 Watt Surface Mount Zener Diodes / SMA (DO-214AC)

Part Number	Zener Voltage			Max. Zener Impedance				Reverse Leakage Current		Max. DC Zener Current	Max. Surge Current	Marking
	VZ @ IZT			IZT@ZZT		ZZK@IZK		IR@VR				
	Min. V	Nom. V	Max. V	mA	Ω	Ω	mA	uA	V	mA	mA	
SMA4735A-A	5.89	6.2	6.51	41	2	700	1	10	3	146	730	35A
SMA4736A-A	6.46	6.8	7.14	37	3.5	700	1	5	4	133	660	36A
SMA4737A-A	7.13	7.5	7.88	34	4	700	0.5	5	5	121	605	37A
SMA4738A-A	7.79	8.2	8.61	31	4.5	700	0.5	5	6	110	550	38A
SMA4739A-A	8.65	9.1	9.56	28	5	700	0.5	0.5	7	100	500	39A
SMA4740A-A	9.5	10	10.5	25	7	700	0.25	0.5	7.6	91	454	40A
SMA4741A-A	10.45	11	11.55	23	8	700	0.25	0.5	8.4	83	414	41A
SMA4742A-A	11.4	12	12.6	21	9	700	0.25	0.5	9.1	76	380	42A
SMA4743A-A	12.35	13	13.65	19	10	700	0.25	0.5	9.9	69	344	43A
SMA4744A-A	14.25	15	15.75	17	14	700	0.25	0.5	11.4	61	305	44A
SMA4745A-A	15.2	16	16.8	15.5	16	700	0.25	0.5	12.2	57	285	45A
SMA4746A-A	17.1	18	18.9	14	20	750	0.25	0.5	13.7	50	250	46A
SMA4747A-A	19	20	21	12.5	22	750	0.25	0.5	15.2	45	225	47A
SMA4748A-A	20.9	22	23.1	11.5	23	750	0.25	0.5	16.7	41	205	48A
SMA4749A-A	22.8	24	25.2	10.5	25	750	0.25	0.5	18.2	38	190	49A
SMA4750A-A	25.65	27	28.35	9.5	35	750	0.25	0.5	20.6	34	170	50A
SMA4751A-A	28.5	30	31.5	8.5	40	1000	0.25	0.5	22.8	30	150	51A
SMA4752A-A	31.35	33	34.65	7.5	45	1000	0.25	0.5	25.1	27	135	52A
SMA4753A-A	34.2	36	37.8	7	50	1000	0.25	0.5	27.4	25	125	53A
SMA4754A-A	37.05	39	40.95	6.5	60	1000	0.25	0.5	29.7	23	115	54A
SMA4755A-A	40.85	43	45.15	6	70	1500	0.25	0.5	32.7	22	110	55A
SMA4756A-A	44.65	47	49.35	5.5	80	1500	0.25	0.5	35.8	19	95	56A
SMA4757A-A	48.45	51	53.55	5	95	1500	0.25	0.5	38.8	18	90	57A
SMA4758A-A	53.2	56	58.8	4.5	110	2000	0.25	0.5	42.6	16	80	58A
SMA4759A-A	58.9	62	65.1	4	125	2000	0.25	0.5	47.1	14	70	59A
SMA4760A-A	64.6	68	71.4	3.7	150	2000	0.25	0.5	51.7	13	65	60A
SMA4761A-A	71.25	75	78.78	3.3	175	2000	0.25	0.5	56	12	60	61A
SMA4762A-A	77.9	82	86.1	3	200	3000	0.25	0.5	62.2	11	55	62A
SMA4763A-A	86.45	91	95.55	2.8	250	3000	0.25	0.5	69.2	10	50	63A
SMA4764A-A	95	100	105	2.5	350	3000	0.25	0.5	76	9	45	64A
SZ1110A-A	104.5	110	115.5	2.3	450	4000	0.25	0.5	83.6	8.6	40	11Z
SZ1120A-A	114	120	126	2	550	4500	0.25	0.5	91.2	7.8	37	12Z
SZ1130A-A	123.5	130	136.5	1.9	700	5000	0.25	0.5	98.8	7	34	13Z
SZ1150A-A	142.5	150	157.5	1.7	1000	6000	0.25	0.5	114	6.4	30	15Z
SZ1160A-A	152	160	168	1.6	1100	6500	0.25	0.5	121.6	5.8	28	16Z
SZ1180A-A	171	180	189	1.4	1200	7000	0.25	0.5	136.8	5.2	25	18Z
SZ1200A-A	190	200	210	1.2	1900	9990	0.25	0.5	152	4.7	22	20Z
SZ1220A-A	209	220	231	1	1600	8000	0.25	0.5	167.2	4	20	22Z
SZ1240A-A	228	240	252	0.9	1800	8500	0.25	0.5	182.4	3.8	19	24Z
SZ1250A-A	237.5	250	262.5	0.9	2000	9000	0.25	0.5	190	3.6	18	25Z
SZ1370A-A	256.5	270	283.5	0.8	2100	9000	0.25	0.5	205	3.3	16	27Z
SZ1300A-A	285	300	315	0.8	2300	9500	0.25	0.5	228	3	15	30Z
SZ1330A-A	313.5	330	346.5	0.7	2500	9500	0.25	0.5	250.2	2.7	13	33Z

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

# DEVICE CHARACTERISTICS

## SMA47xxA-A Series

### Rating and Characteristics Curves

Fig. 1 - Power Temperature Derating Curve

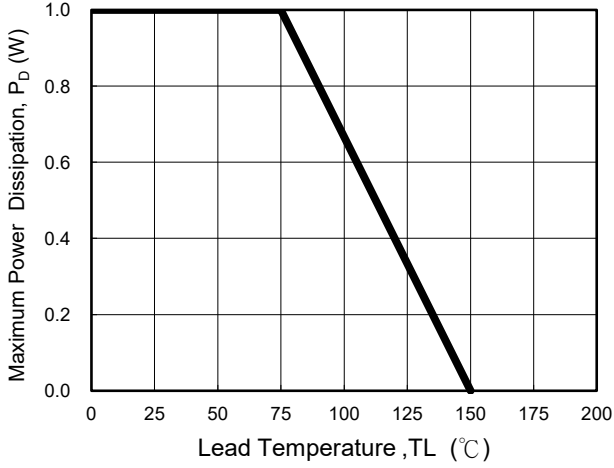


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

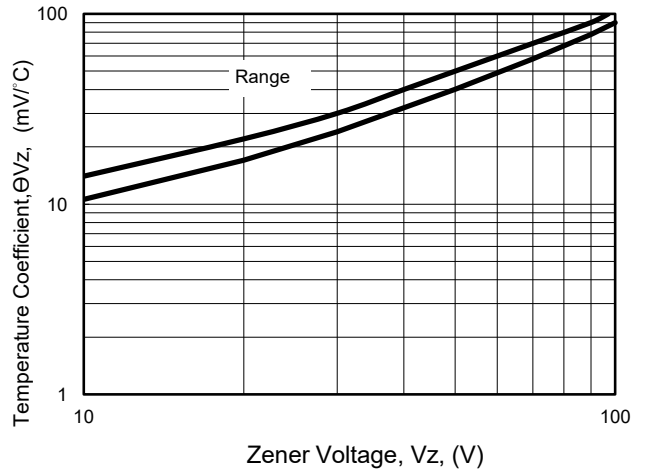


Fig. 3 - Maximum Surge Power

