

Features

- . P_{tot} 1.0W
- . V_Z 3.0V- 300V
- . The marking bar indicates the cathode

SMA



Marking: 7XXA

XX : 27 To 64

Limiting values(Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	Max
Power dissipation	P_d	W	$T_L=75^{\circ}\text{C}$	1.0
Zener current	I_Z	mA		P_V / V_Z
Operation Junction and Storage Temperature Range	T_J, T_{stg}	$^{\circ}\text{C}$		-55 ~ +150

Electrical Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Conditions	Max
Thermal resistance	$R_{\theta JA}$	$^{\circ}\text{C/W}$	Between junction to ambient	75
	$R_{\theta JL}$	$^{\circ}\text{C/W}$	Between junction to lead	30
Forward voltage	V_F	V	$I_F=200\text{mA}$	1.2

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

Number	Code	Zener Voltage		Zener Impedance			Reverse Leakage Current		DC Zener Current	Surge Current
		V _Z @ I _{ZT}	I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R @ V _R		I _{ZM}	I _{RM}
		(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)	(mA _{pk})
1SMA4727A	727A	3.0	83.0	10.0	400	1.00	150.0	1.0	274.0	1370
1SMA4728A	728A	3.3	76.0	10.0	400	1.00	100.0	1.0	274.0	1370
1SMA4729A	729A	3.6	69.0	10.0	400	1.00	100.0	1.0	251.0	1255
1SMA4730A	730A	3.9	64.0	9.0	400	1.00	50.0	1.0	232.0	1160
1SMA4731A	731A	4.3	58.0	9.0	400	1.00	20.0	1.0	210.0	1050
1SMA4732A	732A	4.7	53.0	8.0	500	1.00	10.0	1.0	192.0	960
1SMA4733A	733A	5.1	49.0	7.0	550	1.00	10.0	1.0	177.0	885
1SMA4734A	734A	5.6	45.0	5.0	600	1.00	10.0	2.0	161.0	805
1SMA4735A	735A	6.2	41.0	2.0	700	1.00	10.0	3.0	146.0	730
1SMA4736A	736A	6.8	37.0	3.5	700	1.00	5.0	4.0	133.0	660
1SMA4737A	737A	7.5	34.0	4.0	700	0.50	5.0	5.0	121.0	605
1SMA4738A	738A	8.2	31.0	4.5	700	0.50	5.0	6.0	110.0	550
1SMA4739A	739A	9.1	28.0	5.0	700	0.50	0.5	7.0	100.0	500
1SMA4740A	740A	10.0	25.0	7.0	700	0.25	0.5	7.6	91.0	454
1SMA4741A	741A	11.0	23.0	8.0	700	0.25	0.1	8.4	83.0	414
1SMA4742A	742A	12.0	21.0	9.0	700	0.25	0.1	9.1	76.0	380
1SMA4743A	743A	13.0	19.0	10.0	700	0.25	0.1	9.9	69.0	344
1SMA4744A	744A	15.0	17.0	14.0	700	0.25	0.1	11.4	61.0	305
1SMA4745A	745A	16.0	15.5	16.0	700	0.25	0.1	12.2	57.0	285
1SMA4746A	746A	18.0	14.0	20.0	750	0.25	0.1	13.7	50.0	250
1SMA4747A	747A	20.0	12.5	22.0	750	0.25	0.1	15.2	45.0	225
1SMA4748A	748A	22.0	11.5	23.0	750	0.25	0.1	16.7	41.0	205
1SMA4749A	749A	24.0	10.5	25.0	750	0.25	0.1	18.2	38.0	190
1SMA4750A	750A	27.0	9.5	35.0	750	0.25	0.1	20.6	34.0	170
1SMA4751A	751A	30.0	8.5	40.0	1000	0.25	0.1	22.8	30.0	150
1SMA4752A	752A	33.0	7.5	45.0	1000	0.25	0.1	25.1	27.0	135
1SMA4753A	753A	36.0	7.0	50.0	1000	0.25	0.1	27.4	25.0	125
1SMA4754A	754A	39.0	6.5	60.0	1000	0.25	0.1	29.7	23.0	115
1SMA4755A	755A	43.0	6.0	70.0	1500	0.25	0.1	32.7	22.0	110
1SMA4756A	756A	47.0	5.5	80.0	1500	0.25	0.1	35.8	19.0	95
1SMA4757A	757A	51.0	5.0	95.0	1500	0.25	0.1	38.8	18.0	90
1SMA4758A	758A	56.0	4.5	110.0	2000	0.25	0.1	42.6	16.0	80
1SMA4759A	759A	62.0	4.0	125.0	2000	0.25	0.1	47.1	14.0	70
1SMA4760A	760A	68.0	3.7	150.0	2000	0.25	0.1	51.7	13.0	65
1SMA4761A	761A	75.0	3.3	175.0	2000	0.25	0.1	56.0	12.0	60
1SMA4762A	762A	82.0	3.0	200.0	3000	0.25	0.1	62.2	11.0	55
1SMA4763A	763A	91.0	2.8	250.0	3000	0.25	0.1	69.2	10.0	50
1SMA4764A	764A	100.0	2.5	350.0	3000	0.25	0.1	76.0	9.0	45

Typical Characteristics

FIG1: Maximum Continuous Power Dissipation

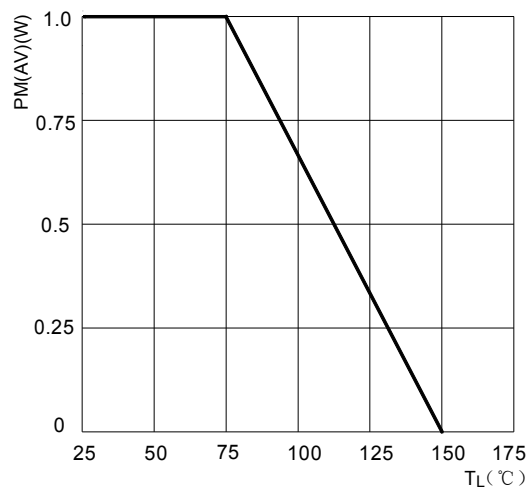


FIG2: Typical Zener Impedance

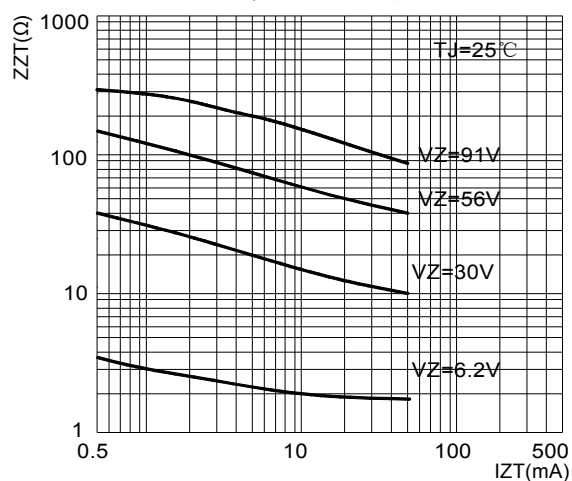


FIG3: Typical Temperature Coefficients

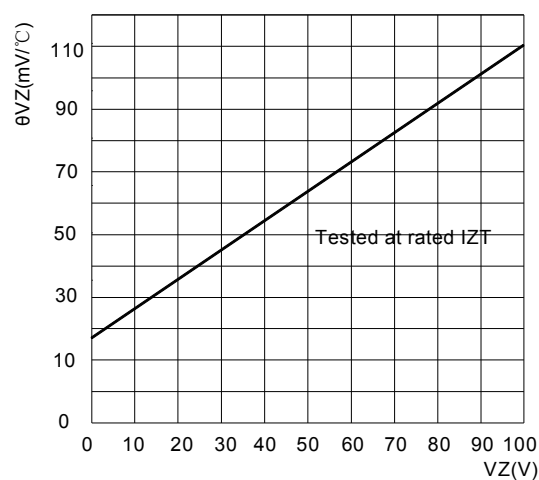


FIG4: Typical Instantaneous Forward Characteristics for SMA4763A

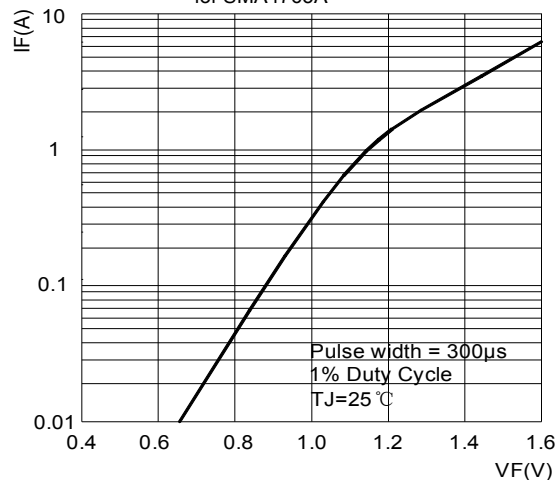
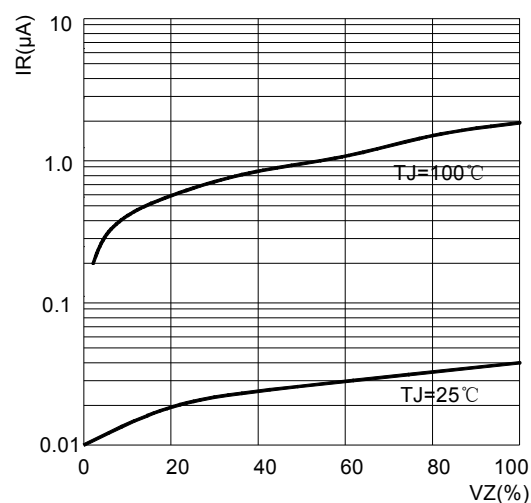
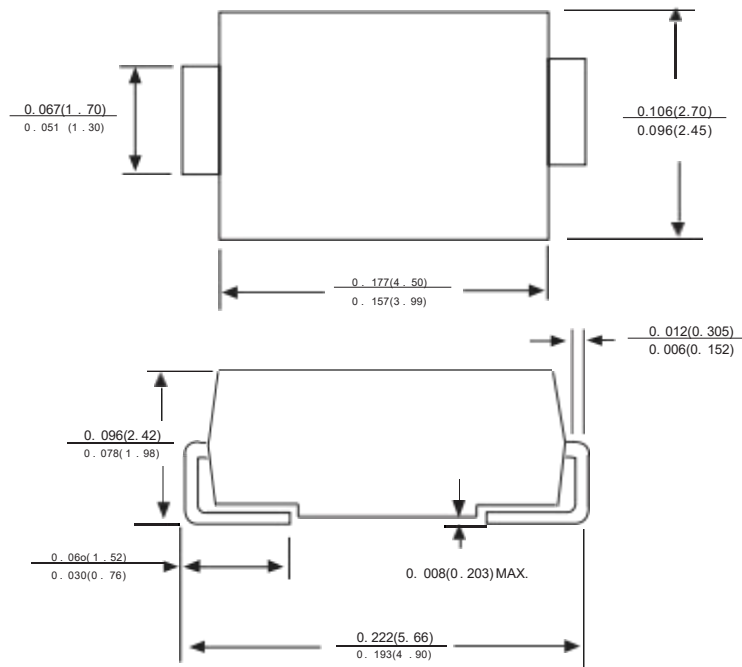


FIG5: Typical Reverse Characteristics

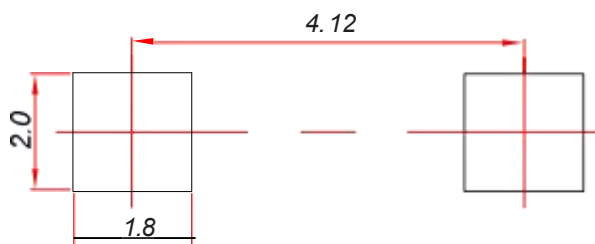


SMA package outline Dimensions



Dimensions in inches and (millimeters)

SMA Suggested pad Layout



Note:

1. controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.