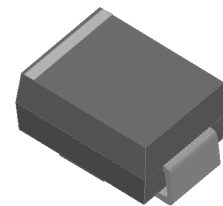


Surface Mount Zener Diodes

Features

Low profile package
 Ideal for automated placement
 Glass passivated chip junction
 High forward surge capability
 Meets MSL level 1, per J -STD-020, LF maximum peak
 of 260 °C
 AEC-Q101 qualified (Automotive grade with suffix "Q".)
 Exsemi technology



Mechanical Data

Package : DO-214AC (SMA)
 Molding compound meets UL 94 V-0 flammability
 rating, RoHS-compliant, halogen-free
 Terminals : Tin plated leads, solderable per
 J-STD-002 and JESD22-B102
 Polarity: Cathode line denotes the cathode end

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

PARAMETER	SYMBOL	UNIT	MAX
Peak power dissipation, with a 10/1000us waveform	P_{tot}	W	1
Zener current	I_z	mA	P_V / V_Z
Maximum junction temperature	T_j	$^\circ\text{C}$	150
Storage temperature range	T_{stg}	$^\circ\text{C}$	-65 to +150

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

PARAMETER	SYMBOL	UNIT	VALUE
Maximum instantaneous forward voltage @ at 25A for unidirectional only $I_F=200\text{mA}$	V_F	V	1.2

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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Thermal resistance(Typical)	$R_{\theta\text{JL}}$	$^\circ\text{C/W}$	junction to lead	30
	$R_{\theta\text{JA}}$	$^\circ\text{C/W}$	junction to ambient	120

ELECTRICAL CHARACTERISTICS @25°C

EXPSEMI PART NUMBER	ZENER VOLTAGE V_Z	TEST CURRENT I_{ZT}	MAXIMUM DYNAMIC IMPEDANCE $Z_{ZT} @ I_{ZT}$	MAXIMUM REVERSE CURRENT I_R	REVERSE VOLTAGE V_R	KNEE IMPEDANCE Z_{ZK}	KNEE CURRENT I_{ZK}	DEVICE MARKING
	VOLTS	mA	OHMS	μ A	VOLTS	OHMS	mA	
SMA4733A	5.1	49	7	10	1	550	1	733A
SMA4734A	5.6	45	5	10	2	600	1	734A
SMA4735A	6.2	41	2	10	3	700	1	735A
SMA4736A	6.8	37	3.5	10	4	700	1	736A
SMA4737A	7.5	34	4	10	5	700	0.5	737A
SMA4738A	8.2	31	4.5	10	6	700	0.5	738A
SMA4739A	9.1	28	5	10	7	700	0.5	739A
SMA4740A	10	25	7	10	7.6	700	0.25	740A
SMA4741A	11	23	8	5	8.4	700	0.25	741A
SMA4742A	12	21	9	5	9.1	700	0.25	742A
SMA4743A	13	19	10	5	9.9	700	0.25	743A
SMA4744A	15	17	14	5	11.4	700	0.25	744A
SMA4745A	16	15.5	16	5	12.2	700	0.25	745A
SMA4746A	18	14	20	5	13.7	750	0.25	746A
SMA4747A	20	12.5	22	5	15.2	750	0.25	747A
SMA4748A	22	11.5	23	5	16.7	750	0.25	748A
SMA4749A	24	10.5	25	5	18.2	750	0.25	749A
SMA4750A	27	9.5	35	5	20.6	750	0.25	750A
SMA4751A	30	8.5	40	5	22.8	1000	0.25	751A
SMA4752A	33	7.5	45	5	25.1	1000	0.25	752A
SMA4753A	36	7	50	5	27.4	1000	0.25	753A
SMA4754A	39	6.5	60	5	29.7	1000	0.25	754A
SMA4755A	43	6	70	5	32.7	1500	0.25	755A
SMA4756A	47	5.5	80	5	35.8	1500	0.25	756A
SMA4757A	51	5	95	5	38.8	1500	0.25	757A
SMA4758A	56	4.5	110	5	42.6	2000	0.25	758A
SMA4759A	62	4	125	5	47.1	2000	0.25	759A
SMA4760A	68	3.7	150	5	51.7	2000	0.25	760A
SMA4761A	75	3.3	175	5	56	2000	0.25	761A
SMA4762A	82	3	200	5	62.2	3000	0.25	762A
SMA4763A	91	2.8	250	5	69.2	3000	0.25	763A
SMA4764A	100	2.5	350	5	76	3000	0.25	764A

Characteristics (Typical)

FIG1: Maximum Continuous Power Dissipation

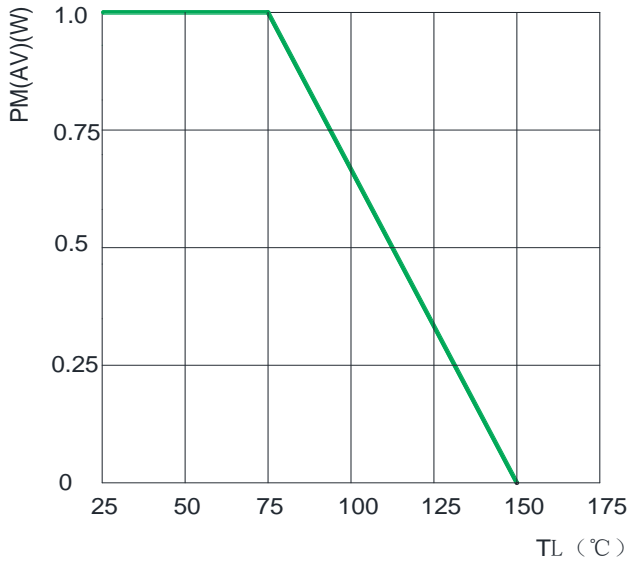


FIG2: Typical Zener Impedance

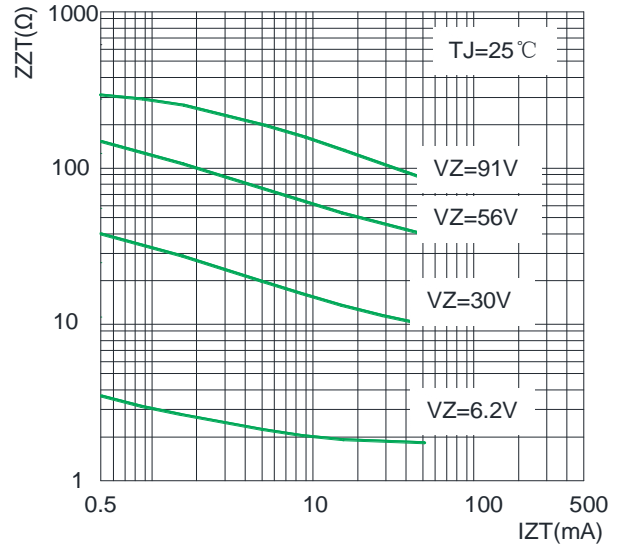


FIG3: Typical Temperature Coefficients



FIG4: Typical Instantaneous Forward Characteristics for SMA4763A

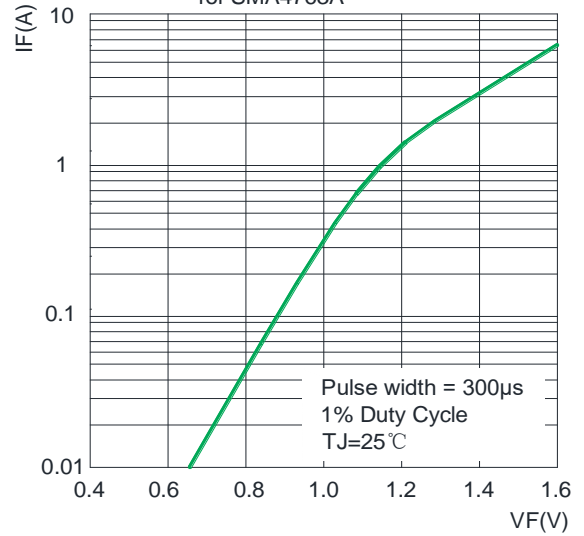
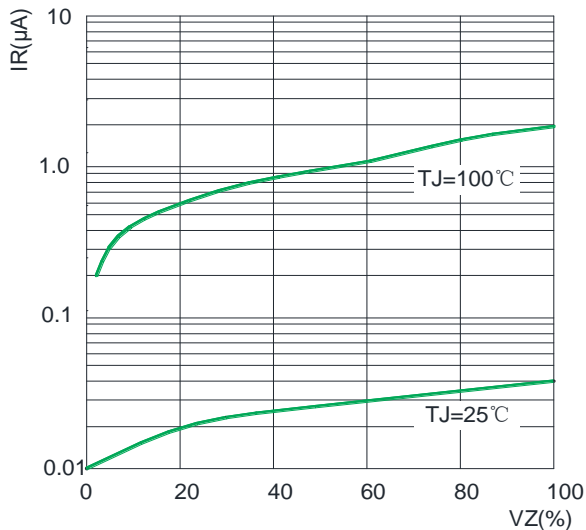
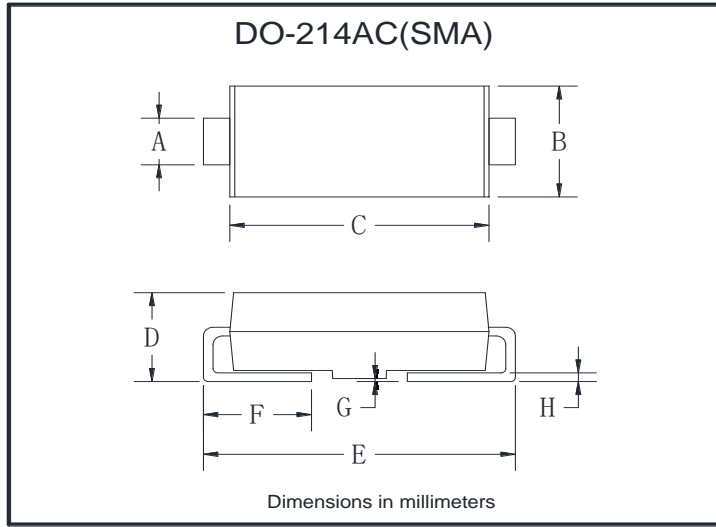


FIG5: Typical Reverse Characteristics



Outline Dimensions



DO-214AC(SMA)		
Dim	Min	Max
A	1.20	1.60
B	2.40	2.90
C	3.99	4.75
D	1.89	2.44
E	4.80	5.28
F	0.76	1.41
G	0.05	0.20
H	0.15	0.31

Packaging

Part number	Component Package	Quantity	Packaging Option	Packaging Specification
SMA47xxA	DO-214AC	5000	Tape & Reel - 12mm tape/13" reel	EIA STD RS-481