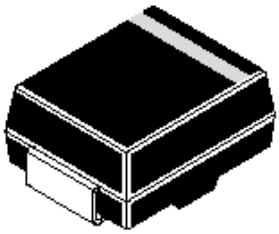
Continental Device India Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

SURFACE MOUNT SILICON ZENER DIODE

1SMA4732 - 1SMA4760
(4V7 - 68V)

DO-214AC (SMA)
Surface Mount Package



ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Power Dissipation @ T_a=50ºC	*P_D	1.0	W
Derate Above 50ºC		6.67	mW/ºC
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	**I_{FSM}	10	A
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 55 to +150	°C

*** Mounted on 5.0mm^2 (0.013mm thick) land areas**

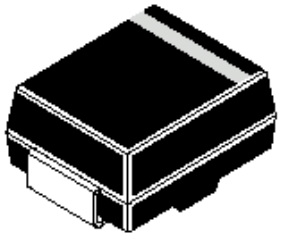
**** Measured on 8.3ms, and single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum**

ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise) V_F @ 200mA <1.2V

Device #	Zener Voltage			Zener Impedance				Reverse Leakage		Marking Code
	V_Z @ I_{ZT} (V) +/- 5%			Z_{ZT} @ I_{ZT}		Z_{ZK} @ I_{ZK}		I_R @	V_R	
	Nom. V	min	max	(W) max	(mA)	(W) max	(mA)	(mA) max	(V)	
1SMA4732	4.7	4.50	4.90	8.0	53.0	500	1.0	10	1.0	732B
1SMA4733	5.1	4.80	5.40	7.0	49.0	550	1.0	10	1.0	733B
1SMA4734	5.6	5.30	5.90	5.0	45.0	600	1.0	10	2.0	734B
1SMA4735	6.2	5.90	6.50	2.0	41.0	700	1.0	10	3.0	735B
1SMA4736	6.8	6.50	7.10	3.5	37.0	700	1.0	10	4.0	736B
1SMA4737	7.5	7.10	7.90	4.0	34.0	700	0.50	10	5.0	737B
1SMA4738	8.2	7.80	8.60	4.5	31.0	700	0.50	10	6.0	738B
1SMA4739	9.1	8.60	9.60	5.0	28.0	700	0.50	10	7.0	739B
1SMA4740	10	9.50	10.50	7.0	25.0	700	0.25	10	7.6	740B
1SMA4741	11	10.50	11.60	8.0	23.0	700	0.25	0.1	8.4	741B
1SMA4742	12	11.40	12.60	9.0	21.0	700	0.25	0.1	9.1	742B
1SMA4743	13	12.40	13.70	10	19.0	700	0.25	0.1	9.9	743B
1SMA4744	15	14.30	15.80	14	17.0	700	0.25	0.1	11.4	744B
1SMA4745	16	15.20	16.80	16	15.5	700	0.25	0.1	12.2	745B
1SMA4746	18	17.10	18.90	20	14.0	750	0.25	0.1	13.7	746B
1SMA4747	20	19.00	21.00	22	12.5	750	0.25	0.1	15.2	747B
1SMA4748	22	20.90	23.10	23	11.5	750	0.25	0.1	16.7	748B
1SMA4749	24	22.80	25.20	25	10.5	750	0.25	0.1	18.2	749B
1SMA4750	27	25.70	28.40	35	9.5	750	0.25	0.1	20.6	750B
1SMA4751	30	28.50	31.50	40	8.5	1000	0.25	0.1	22.8	751B
1SMA4752	33	31.40	34.70	45	7.5	1000	0.25	0.1	25.1	752B
1SMA4753	36	34.20	37.80	50	7.0	1000	0.25	0.1	27.4	753B
1SMA4754	39	37.10	41.00	60	6.5	1000	0.25	0.1	29.7	754B
1SMA4755	43	40.90	45.20	70	6.0	1500	0.25	0.1	32.7	755B

SURFACE MOUNT SILICON DIODE

1SMA4732 - 1SMA4760
DO214-AC (SMA)



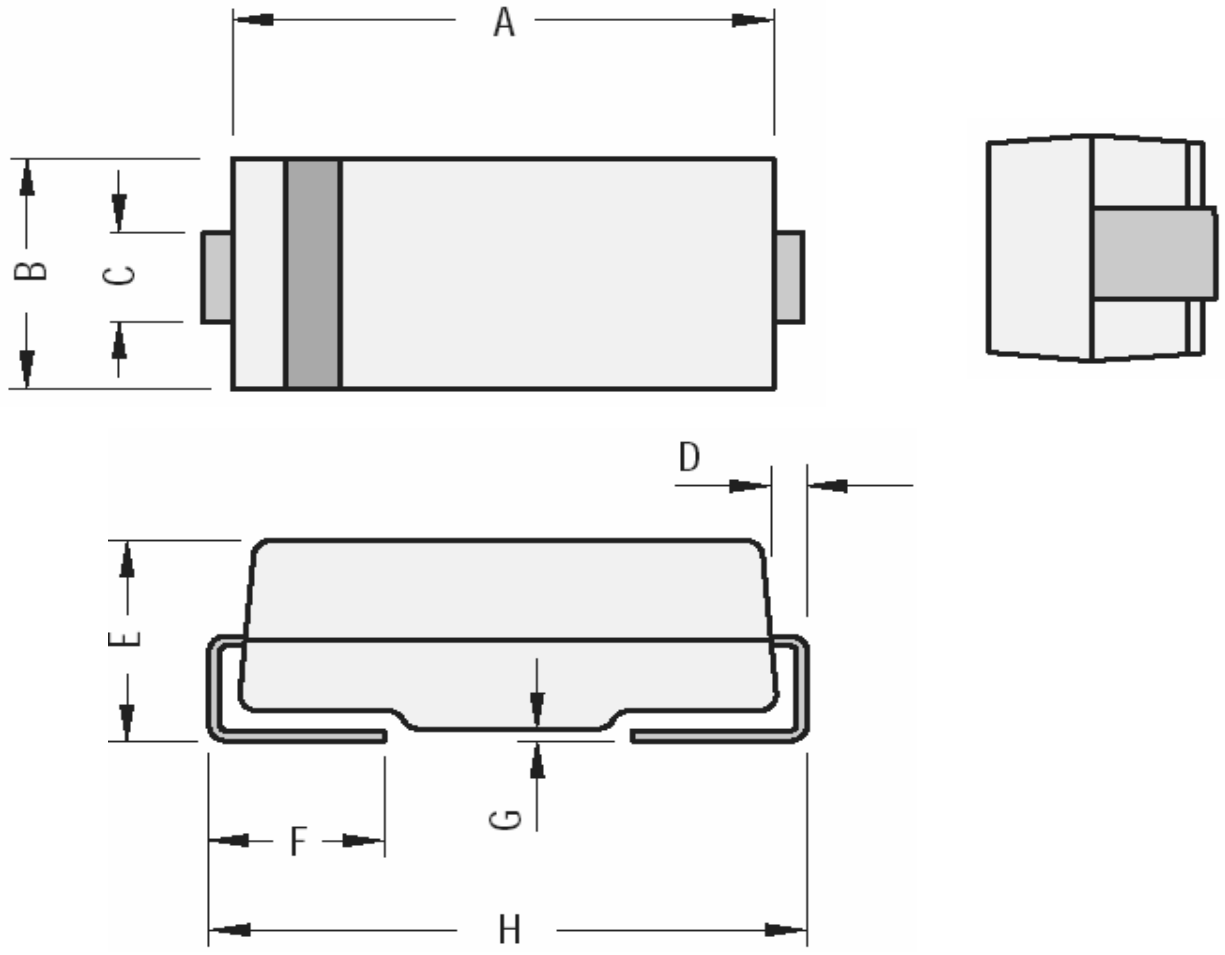
DO-214AC (SMA)
Surface Mount Package

ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise) **V_F @ 200mA <1.2V**

Device #	Nom. V	Zener Voltage V_Z @ I_{ZT} (V) +/- 5% min		Zener Impedance Z_{ZT} @ I_{ZT} (Ω) max	(mA)	Z_{ZK} @ I_{ZK} (Ω) max	(mA)	Reverse Leakage I_R @ (μA) max	V_R (V)	Marking Code
		max								
1SMA4756	**47**	44.70	49.40	80	5.5	1500	0.25	0.1	35.8	756B
1SMA4757	**51**	48.50	53.60	95	5.0	1500	0.25	0.1	38.8	757B
1SMA4758	**56**	53.20	58.80	110	4.5	2000	0.25	0.1	42.6	758B
1SMA4759	**62**	58.90	65.10	125	4.0	2000	0.25	0.1	47.1	759B
1SMA4760	**68**	64.60	71.40	150	3.7	2000	0.25	0.1	51.7	760B

1SMA4732_4760Rev080205E

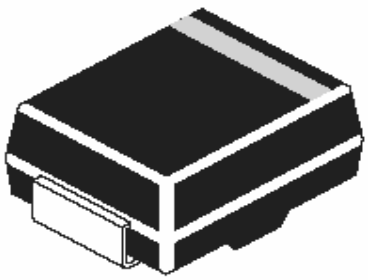
DO-214AC (SMA) SMD Plastic Package



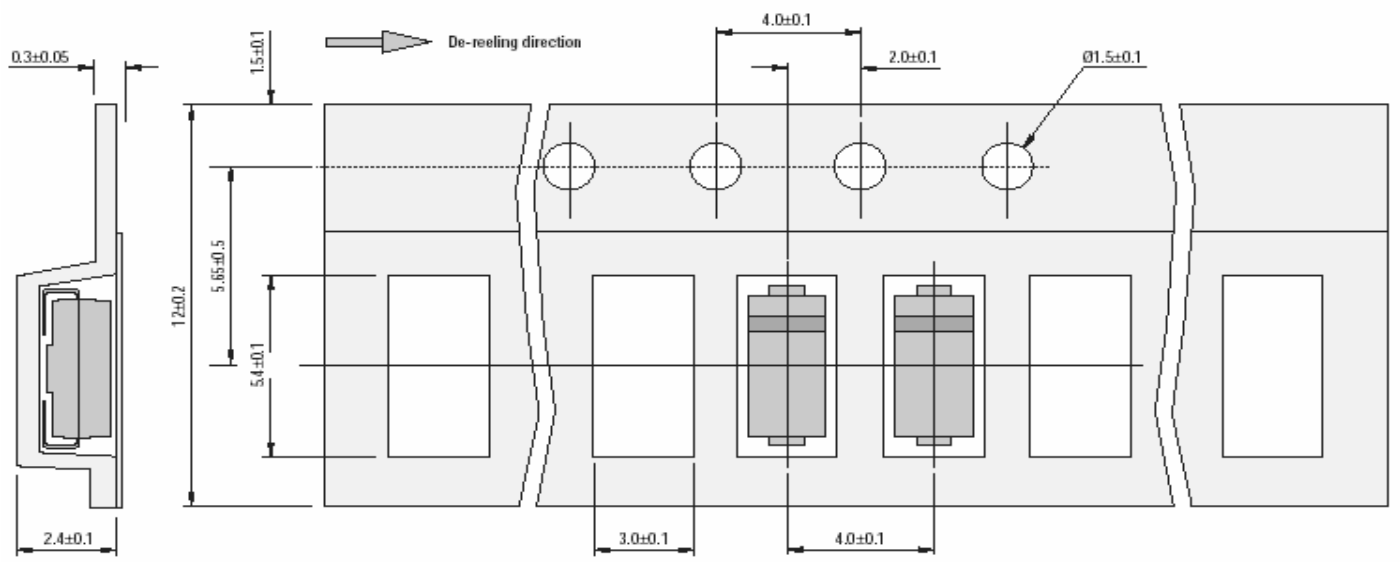
DIM	Min	Max
A	4.06	4.57
B	2.18	2.79
C	1.29	1.70
D	0.152	0.305

DIM	Min	Max
E	1.70	2.31
F	0.89	1.50
G	0.102	0.203
H	4.70	5.31

All Dimensions are in mm



SMA Packaging Tape



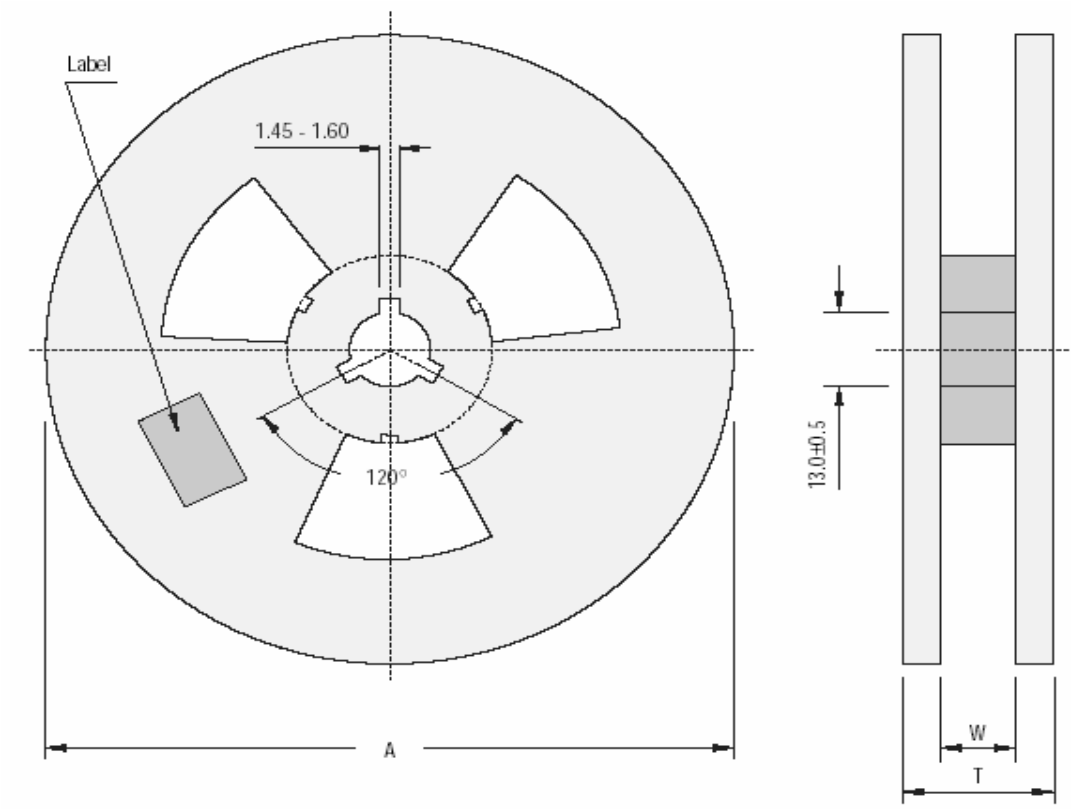
All Dimensions are in mm

Packaging Information

Package/	Packaging Type	Std. Packing	Inner Carton			Outer Carton		
Case Type		Qty	Qty	Size L x W x H	Gross Weight	Qty	Size L x W x H	Gross Weight
				(cm)	(Kg)		(cm)	(Kg)
DO-214AC (SMA)	T&R	5,000				50K	46 x 38 x 22	7.9

T & R: Tape and Reel

Reel Dimensions and Components/Reel for SMD Package



Reel Specifications				
Package	Tape Width	Reel Dia. A - Max	Inside Thickness W	Reel Thickness T - max
DO-214AC (SMA)	12	330	12.4 ± 2	18.4

All Dimensions are in mm

Components Disposal Instructions

1. CDIL Semiconductor Devices are non-recyclable RoHS free material, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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