

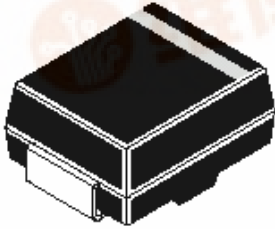


Continental Device India Limited  
An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



**SURFACE MOUNT SILICON ZENER DIODE**

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



**DO-214AC (SMA)  
Surface Mount Package**

**ABSOLUTE MAXIMUM RATINGS**

DESCRIPTION	SYMBOL	VALUE	UNIT
Power Dissipation @ $T_a=50^{\circ}\text{C}$ Derate Above $50^{\circ}\text{C}$	$*P_D$	1.0 6.67	W mW/ $^{\circ}\text{C}$
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	$^{\circ}\text{C}$

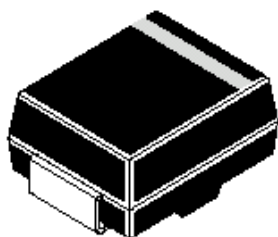
\* Mounted on  $5.0\text{mm}^2$  ( 0.013mm thick) land areas

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

**ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$  unless specified otherwise)  $V_F @ 200\text{mA} < 1.2\text{V}$**

Device #	Zener Voltage			Zener Impedance				Reverse Leakage		Marking Code
	$V_Z @ I_{ZT}$ (V) +/- 5%			$Z_{ZT} @ I_{ZT}$		$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$	$V_R$	
	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

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DO214-AC (SMA)**

**DO-214AC (SMA)  
Surface Mount Package**

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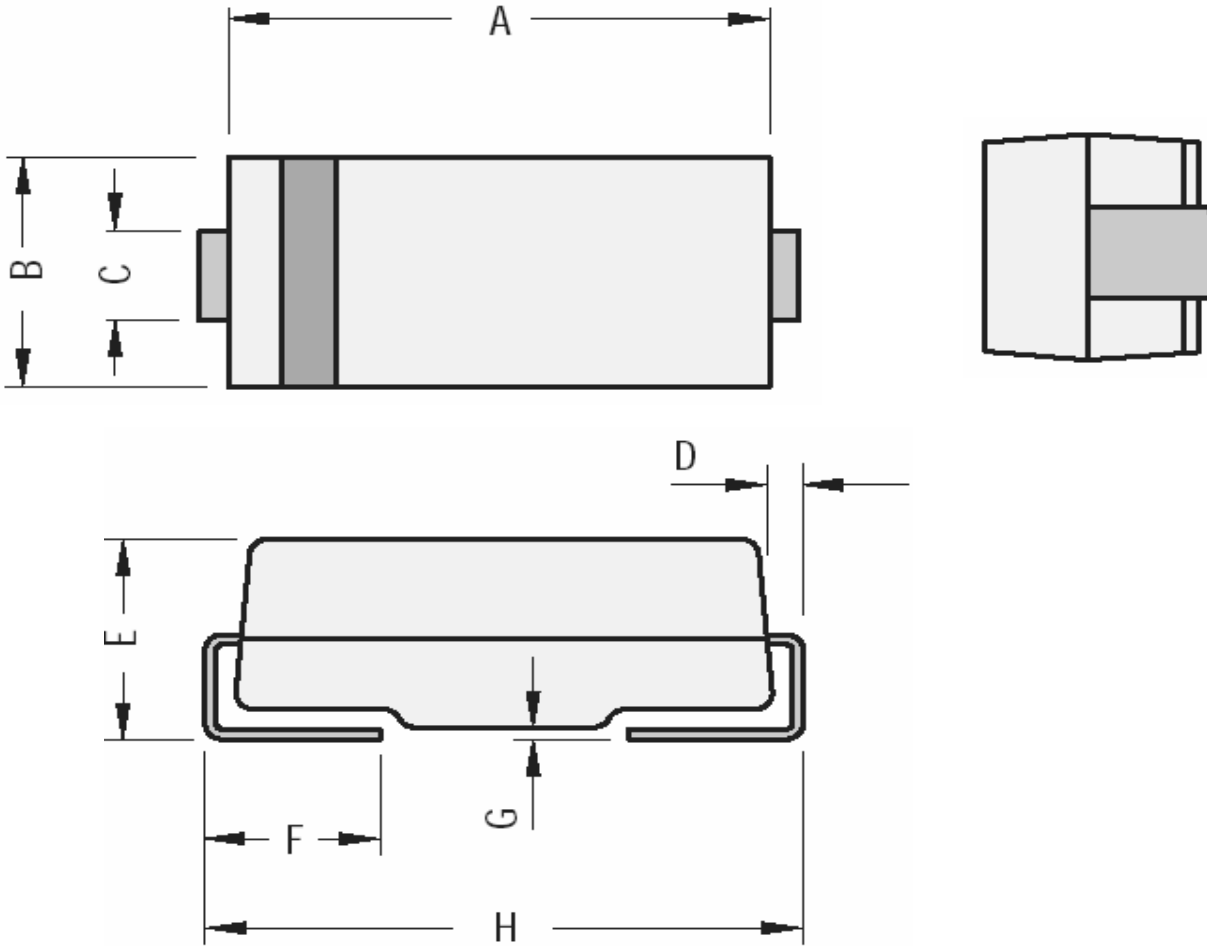
Device #	Nom. V	Zener Voltage		Zener Impedance				Reverse Leakage		Marking Code
		$V_Z @ I_{ZT}$		$Z_{ZT} @ I_{ZT}$		$Z_{ZK} @ I_{ZK}$		$I_R @$	$V_R$	
		(V) +/- 5%		(W)	(mA)	(W)	(mA)	(mA)	(V)	
		min	max	max		max		max		
<b>1SMA4756</b>	<b>47</b>	44.70	49.40	80	5.5	1500	0.25	0.1	35.8	756B
<b>1SMA4757</b>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

1SMA4732\_4760Rev080205E

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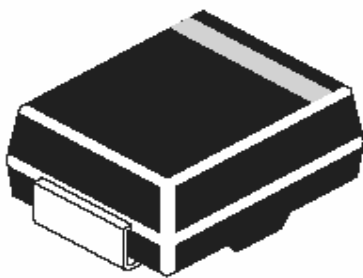
**DO-214AC (SMA) SMD Plastic Package**



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

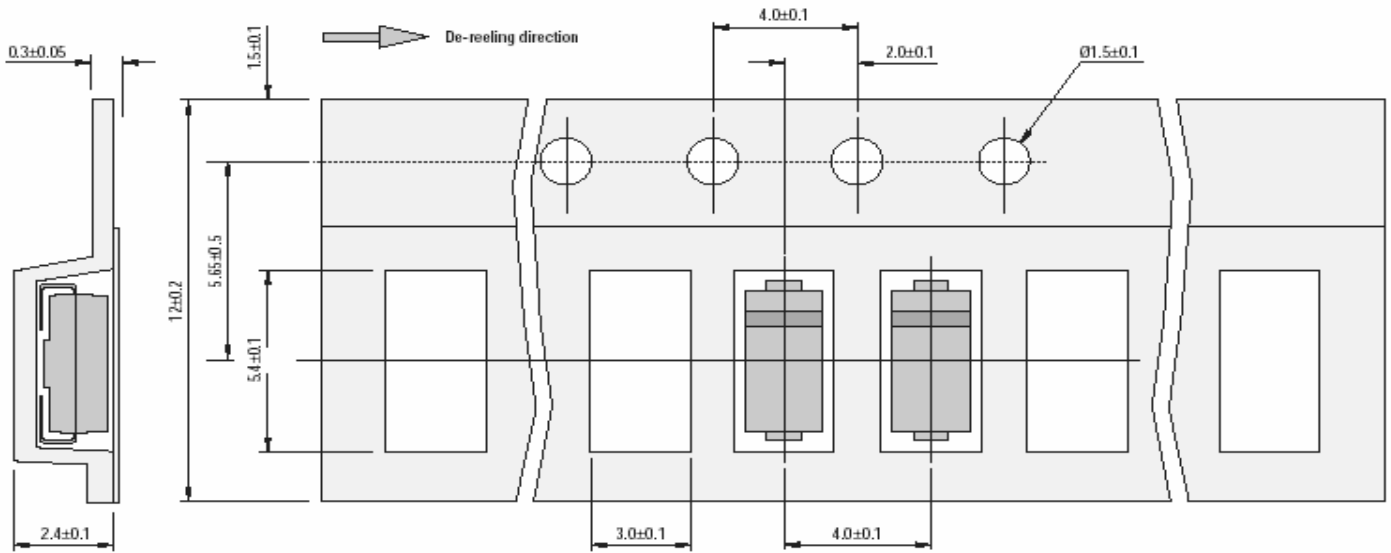
**All Dimensions are in mm**



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**DO-214AC (SMA)  
Surface Mount Package**

**SMA Packaging Tape**



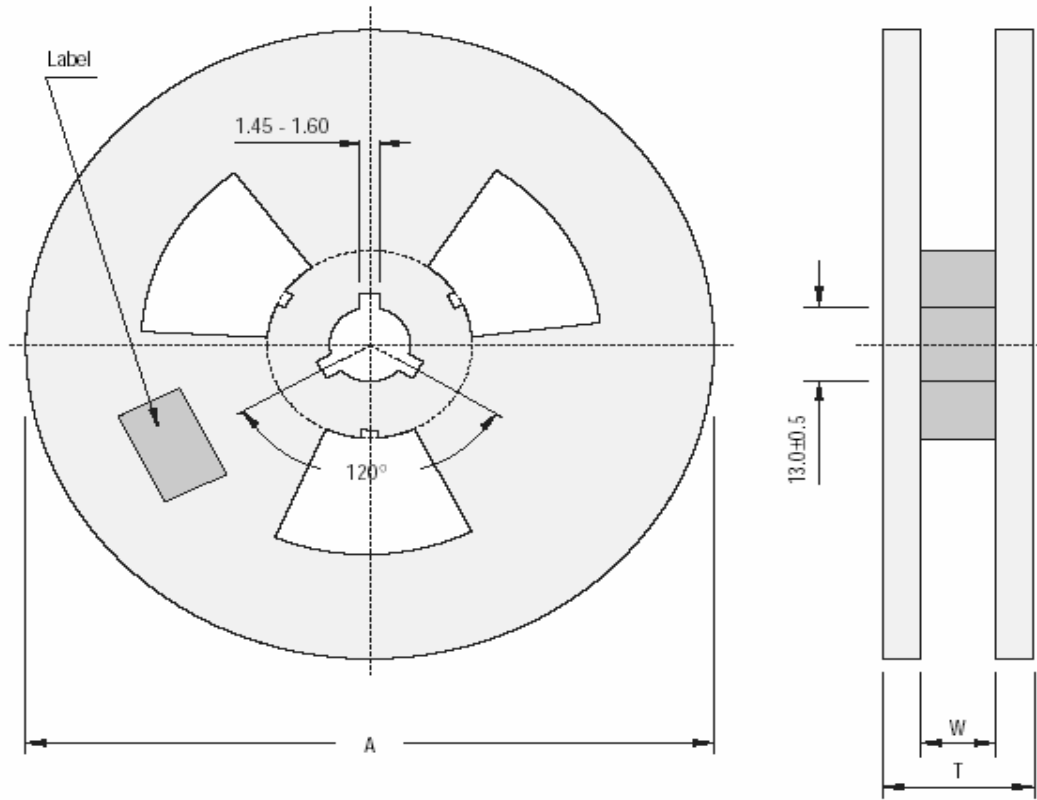
All Dimensions are in mm

**Packaging Information**

Package/ Case Type	Packaging Type	Std. Packing Qty	Inner Carton		Outer Carton			
			Qty	Size L x W x H (cm)	Gross Weight (Kg)	Qty	Size L x W x H (cm)	Gross Weight (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.	Inside Thickness	Reel Thickness
		A - Max	W	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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**Continental Device India Limited**

C-120 Naraina Industrial Area, New Delhi 110 028, India.  
 Telephone + 91-11-2579 6150, 4141 1112 Fax + 91-11-2579 5290, 4141 1119  
 email@cdil.com www.cdilsemi.com