



查询"1SMA5917"供应商

Continental Device India Limited

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



## SURFACE MOUNT SILICON ZENER DIODE

1SMA5917 - 1SMA5945  
(4V7 - 68V)



DO-214AC (SMA)  
Surface Mount Package

### ABSOLUTE MAXIMUM RATINGS

| DESCRIPTION  | SYMBOL         | VALUE        | UNIT                 |
|--|----------------|--------------|----------------------|
| Power Dissipation @ $T_a=50^\circ\text{C}$   | $*P_D$         | 1.5          | W                    |
| Derate Above $50^\circ\text{C}$  |                | 15           | 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 area

\*\* 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) $V_F @ 200\text{mA} < 1.2\text{V}$

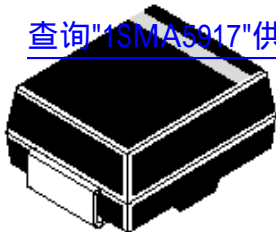
| Device # | Zener Voltage  |       |       | Zener Impedance   |      |                   |      | Reverse Leakage |       | Marking Code |
|----------|----------------|-------|-------|-------------------|------|-------------------|------|-----------------|-------|--------------|
|          | $V_z @ I_{ZT}$ |       |       | $Z_{ZT} @ I_{ZT}$ |      | $Z_{ZK} @ I_{ZK}$ |      | $I_R @$         | $V_R$ |              |
|          | Nom. V         | min   | max   | (W) max           | (mA) | (W) max           | (mA) | (mA) max        | (V)   |              |
| 1SMA5917 | 4.7            | 4.46  | 4.94  | 5.0               | 79.8 | 500               | 1.0  | 5.0             | 1.5   | 917A         |
| 1SMA5918 | 5.1            | 4.84  | 5.36  | 4.0               | 73.5 | 350               | 1.0  | 5.0             | 2.0   | 918A         |
| 1SMA5919 | 5.6            | 5.32  | 5.88  | 2.0               | 66.9 | 250               | 1.0  | 5.0             | 3.0   | 919A         |
| 1SMA5920 | 6.2            | 5.89  | 6.51  | 2.0               | 60.5 | 200               | 1.0  | 5.0             | 4.0   | 920A         |
| 1SMA5921 | 6.8            | 6.46  | 7.14  | 2.5               | 55.1 | 200               | 1.0  | 5.0             | 5.2   | 921A         |
| 1SMA5922 | 7.5            | 7.12  | 7.88  | 3.0               | 50.0 | 400               | 0.50 | 5.0             | 6.0   | 922A         |
| 1SMA5923 | 8.2            | 7.79  | 8.61  | 3.5               | 45.7 | 400               | 0.50 | 5.0             | 6.5   | 923A         |
| 1SMA5924 | 9.1            | 8.64  | 9.56  | 4.0               | 41.2 | 500               | 0.50 | 5.0             | 7.0   | 924A         |
| 1SMA5925 | 10             | 9.50  | 10.50 | 4.5               | 37.5 | 500               | 0.25 | 5.0             | 8.0   | 925A         |
| 1SMA5926 | 11             | 10.45 | 11.55 | 5.5               | 34.1 | 550               | 0.25 | 1.0             | 8.4   | 926A         |
| 1SMA5927 | 12             | 11.40 | 12.60 | 6.5               | 31.2 | 550               | 0.25 | 1.0             | 9.1   | 927A         |
| 1SMA5928 | 13             | 12.35 | 13.65 | 7.0               | 28.8 | 550               | 0.25 | 1.0             | 9.9   | 928A         |
| 1SMA5929 | 15             | 14.25 | 15.75 | 9.0               | 25.0 | 600               | 0.25 | 1.0             | 11.4  | 929A         |
| 1SMA5930 | 16             | 15.20 | 16.80 | 10                | 23.4 | 600               | 0.25 | 1.0             | 12.2  | 930A         |
| 1SMA5931 | 18             | 17.10 | 18.90 | 12                | 20.8 | 650               | 0.25 | 1.0             | 13.7  | 931A         |
| 1SMA5932 | 20             | 19.00 | 21.00 | 14                | 18.7 | 650               | 0.25 | 1.0             | 15.2  | 932A         |
| 1SMA5933 | 22             | 20.90 | 23.10 | 17.5              | 17.0 | 650               | 0.25 | 1.0             | 16.7  | 933A         |
| 1SMA5934 | 24             | 22.80 | 25.20 | 19                | 15.6 | 700               | 0.25 | 1.0             | 18.2  | 934A         |
| 1SMA5935 | 27             | 25.65 | 28.35 | 23                | 13.9 | 700               | 0.25 | 1.0             | 20.6  | 935A         |
| 1SMA5936 | 30             | 28.50 | 31.50 | 28                | 12.5 | 750               | 0.25 | 1.0             | 22.8  | 936A         |
| 1SMA5937 | 33             | 31.35 | 34.65 | 33                | 11.4 | 800               | 0.25 | 1.0             | 25.1  | 937A         |
| 1SMA5938 | 36             | 34.20 | 37.80 | 38                | 10.4 | 850               | 0.25 | 1.0             | 27.4  | 938A         |
| 1SMA5939 | 39             | 37.05 | 41.00 | 45                | 9.60 | 900               | 0.25 | 1.0             | 29.7  | 939A         |
| 1SMA5940 | 43             | 40.85 | 45.20 | 53                | 8.70 | 950               | 0.25 | 1.0             | 32.7  | 940A         |

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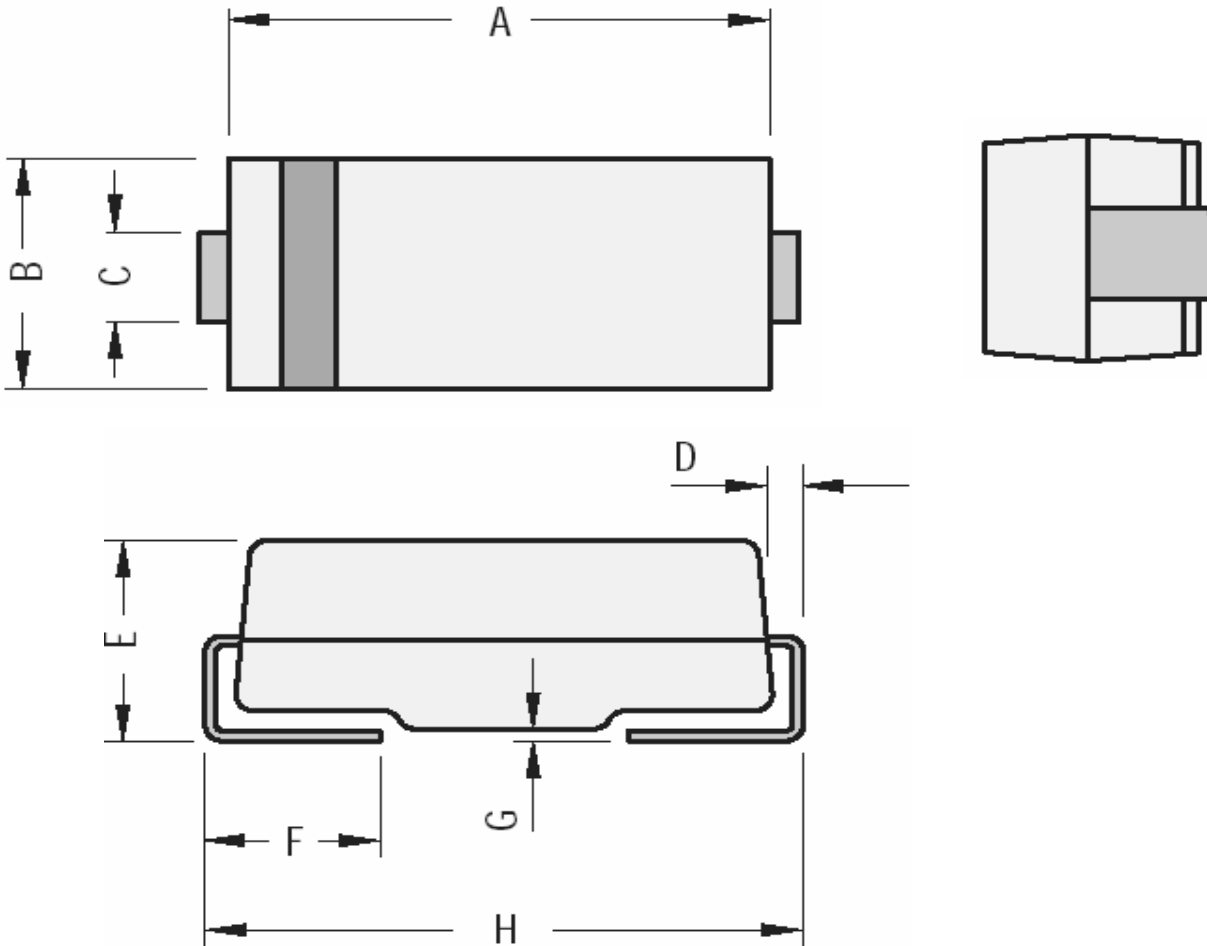
DO-214AC (SMA)  
Surface Mount Package

## ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless specified otherwise) V<sub>F</sub> @ 200mA <1.2V

| Device # | Nom. V | Zener Voltage                    |       | Zener Impedance                   |      |                                   |      | Reverse Leakage  |                | Marking Code |
|----------|--------|----------------------------------|-------|-----------------------------------|------|-----------------------------------|------|------------------|----------------|--------------|
|          |        | V <sub>Z</sub> @ I <sub>ZT</sub> |       | Z <sub>ZT</sub> @ I <sub>ZT</sub> |      | Z <sub>ZK</sub> @ I <sub>ZK</sub> |      | I <sub>R</sub> @ | V <sub>R</sub> |              |
|          |        | (V)                              |       | (W)                               | (mA) | (W)                               | (mA) | (mA)             | (V)            |              |
|          |        | min                              | max   | max                               |      | max                               |      | max              |                |              |
| 1SMA5941 | 47     | 44.65                            | 49.40 | 67                                | 8.00 | 1000                              | 0.25 | 1.0              | 35.8           | 941A         |
| 1SMA5942 | 51     | 48.45                            | 53.60 | 70                                | 7.30 | 1100                              | 0.25 | 1.0              | 38.8           | 942A         |
| 1SMA5943 | 56     | 53.2                             | 58.8  | 86                                | 6.7  | 1300                              | 0.25 | 1.0              | 42.6           | 943A         |
| 1SMA5944 | 62     | 58.9                             | 65.1  | 100                               | 6.0  | 1500                              | 0.25 | 1.0              | 47.1           | 944A         |
| 1SMA5945 | 68     | 64.6                             | 71.4  | 120                               | 5.5  | 1700                              | 0.25 | 1.0              | 51.7           | 945A         |

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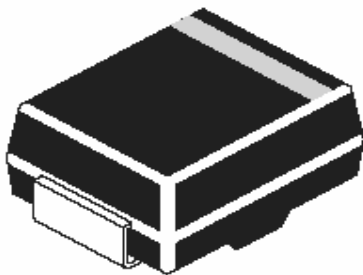
DO-214AC (SMA) SMD Plastic Package



| 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  |

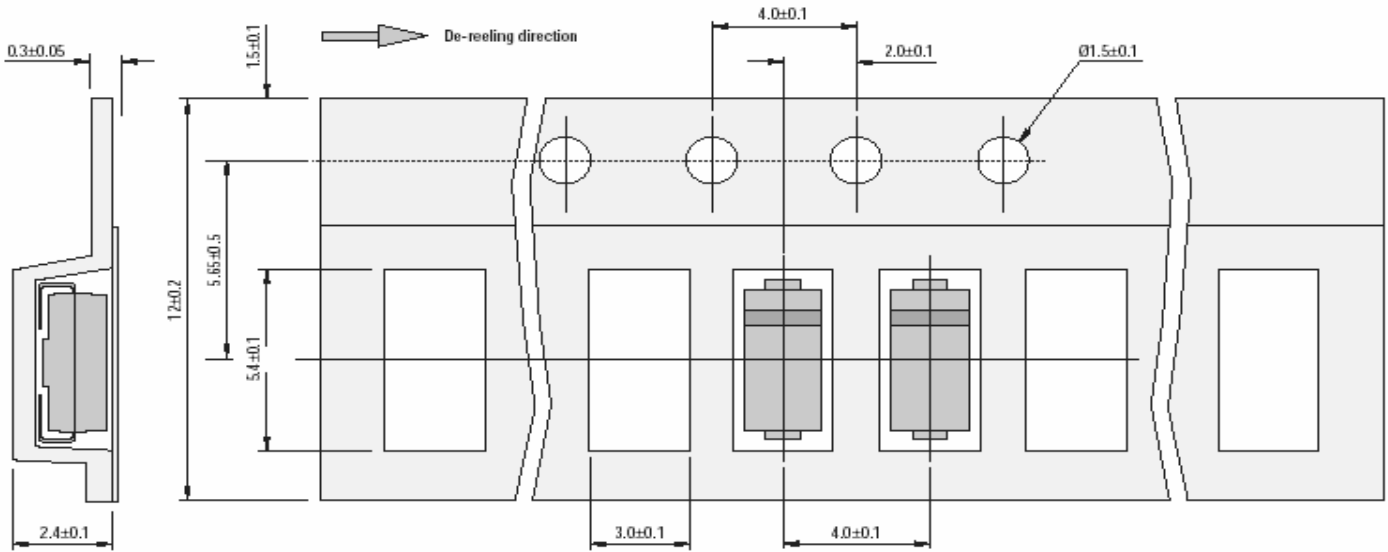
All Dimensions are in mm



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DO-214AC (SMA)  
Surface Mount Package

SMA Packaging Tape



All Dimensions are in mm

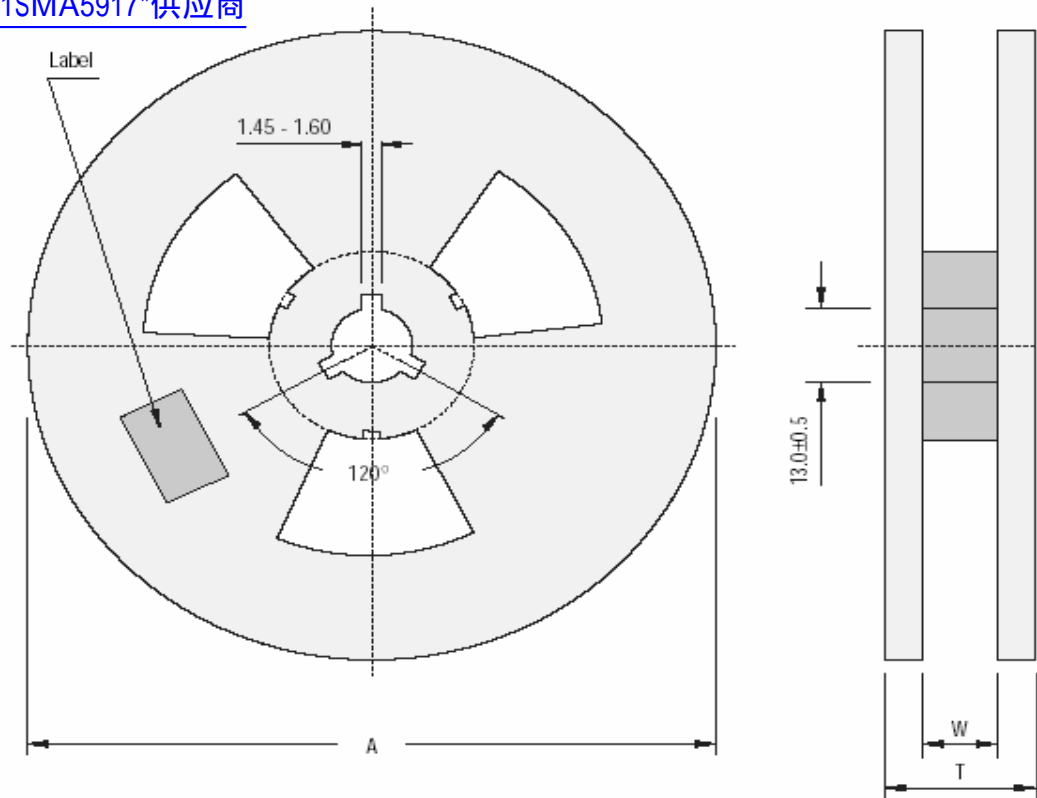
Packaging Information

| Package/<br>Case Type | Packaging Type | Std. Packing |     | Inner Carton           |                      | Outer Carton |                        |                      |
|-----------------------|----------------|--------------|-----|------------------------|----------------------|--------------|------------------------|----------------------|
|                       |                | Qty          | Qty | Size L x W x H<br>(cm) | Gross Weight<br>(Kg) | Qty          | Size L x W x H<br>(cm) | Gross Weight<br>(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**

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**Reel Specifications**

| Package        | Tape Width | Reel Dia.<br>A - Max | Inside Thickness<br>W | Reel Thickness<br>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).

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