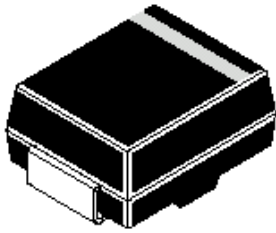


SURFACE MOUNT SILICON ZENER DIODE

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



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

ABSOLUTE MAXIMUM RATINGS

| DESCRIPTION | SYMBOL | VALUE | UNIT |
|--|-----------------------------------|--------------|-------|
| Power Dissipation @ T _a =50°C | *P _D | 1.0 | W |
| Derate Above 50°C | | 6.67 | mW/°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 | °C |

* Mounted on 5.0mm² (0.013mm thick) land areas

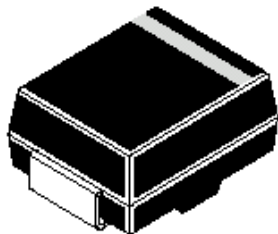
** Measured on 8.3ms, and single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum

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 |

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SURFACE MOUNT SILICON DIODE



**1SMA4732 - 1SMA4760
DO214-AC (SMA)**

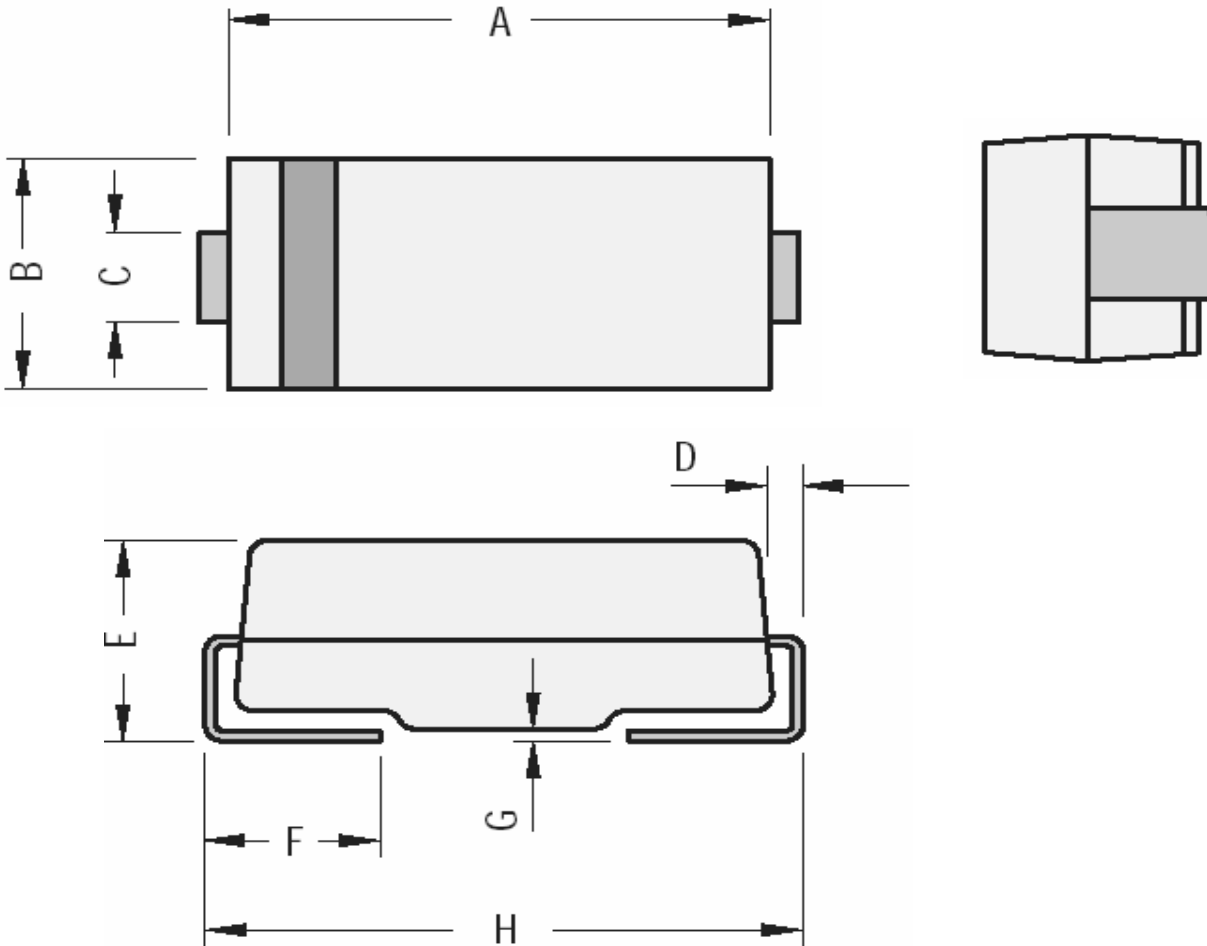
**DO-214AC (SMA)
Surface Mount Package**

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

| Device # | Nom. V | Zener Voltage | | 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 | | |
| 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

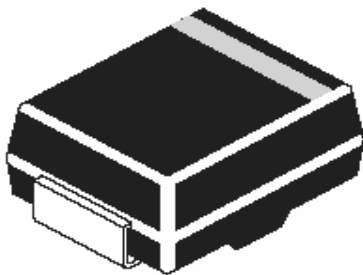
DO-214AC (SMA) SMD Plastic Package



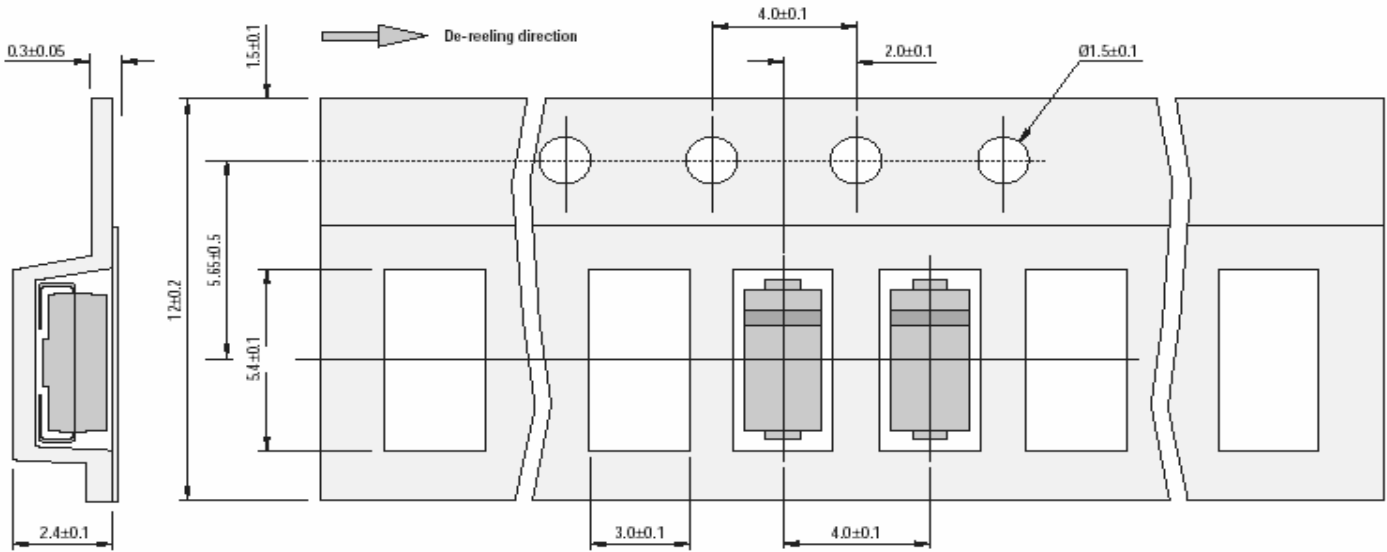
| DIM | Min | Max |
|-----|-------|-------|
| A | 4.06 | 4.57 |
| B | 2.18 | 2.79 |
| C | 1.29 | 1.70 |
| D | 0.152 | 0.305 |

| 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



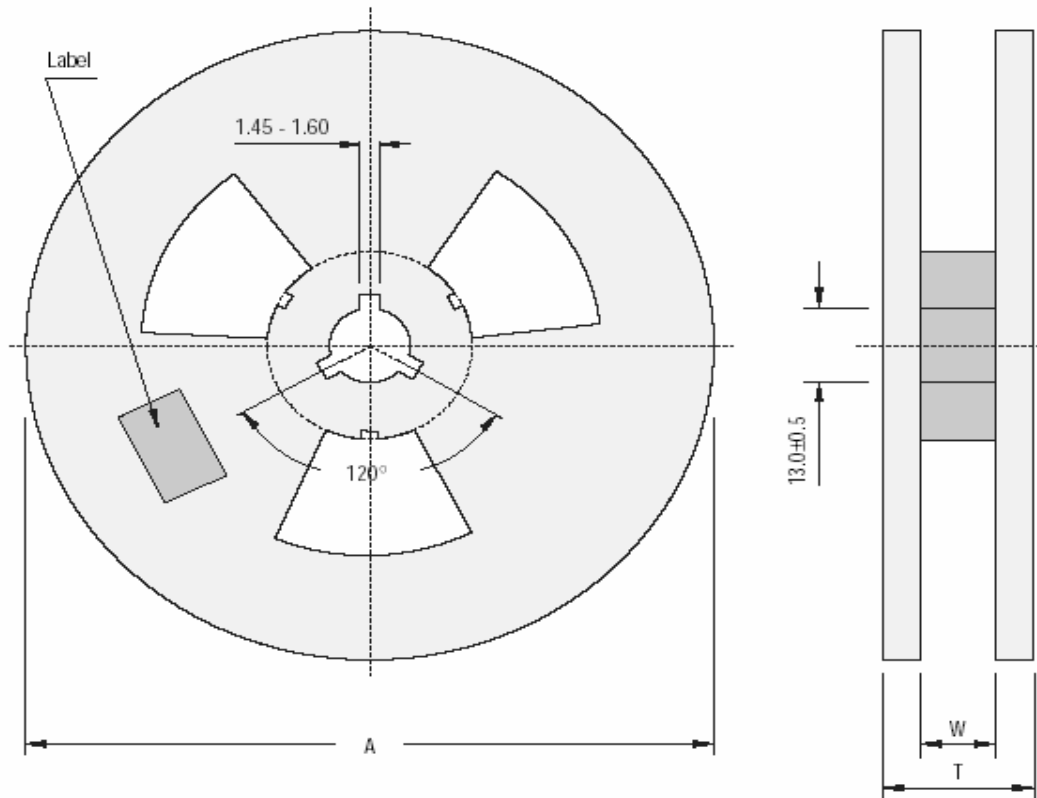
All Dimensions are in mm

Packaging Information

| Package/ Case Type | Packaging Type | Std. Packing | | Inner Carton | | Outer Carton | | |
|-----------------------|----------------|--------------|-----|------------------------|----------------------|--------------|------------------------|----------------------|
| | | Qty | 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. 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).

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