

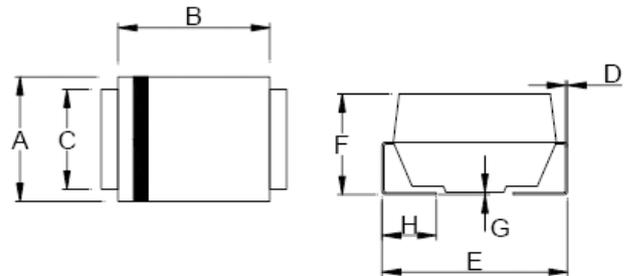
Technical Data

Green Products

Data Sheet N0196, Rev. -

Features

- Glass Passivated Die Construction
- 1.0W Power Dissipation
- 11 –100V Nominal Zener Voltage
- 5% Standard Vz Tolerance
- Low Inductance
- Typical IR Less Than 5.0μA Above 11V
- Plastic Case Material has UL Flammability Classification Rating 94V-0
- Green Products in Compliance with the RoHS Directive
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request



Mechanical Data

- Case: JEDEC DO-214AC Low Profile Molded Plastic
- Terminals: 100% Matte Tin Plating, Solderable Per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Marking: Device Code (See Table Next Page)
- Weight: 0.064 grams (approx.)

| SMA/DO-214AC | | |
|----------------------|-------|-------|
| Dim | Min | Max |
| A | 2.50 | 2.90 |
| B | 4.00 | 4.60 |
| C | 1.40 | 1.60 |
| D | 0.152 | 0.305 |
| E | 4.80 | 5.28 |
| F | 2.00 | 2.44 |
| G | 0.051 | 0.203 |
| H | 0.76 | 1.52 |
| All Dimensions in mm | | |

Ordering Information

| Device | Package | Shipping |
|-------------------|------------------|----------------|
| 1SMA4741-1SMA4764 | SMA (Pb-Free) | 5000pcs / reel |

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings @T_A=25°C unless otherwise specified

| Characteristic | Symbol | Value | Unit |
|---|-----------------------------------|-------------|------------|
| Power Dissipation (Note 1) Derate Above 25°C | P _d | 1.0 8.0 | W mW/°C |
| Forward Voltage @IF = 200mA | V _F | 1.2 | V |
| Non repetitive peak surge power dissipation Tp = 100 μs sq.pulse, Tj = 25°C prior to surge | P _{ZSM} | 600 | W |
| Thermal Resistance Junction to Ambient (Note 1) | R _{θJA} | 120 | °C/W |
| Operating and Storage Temperature Range | T _j , T _{STG} | -65 to +150 | °C |

Note:1.Valid provided that device terminals are kept at ambient temperature



Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

| Type Number (Note 1) | Device Marking Code | Nominal Zener Voltage (Note 2) | Test Current | Maximum Zener Impedance (Note 3) | | | Leakage Current | | Max. Surge Current 8.3ms |
|-------------------------|---------------------------|-----------------------------------|-----------------|-------------------------------------|--------------|------|-------------------|------|--------------------------------|
| | | Vz @ Izt | Izt | Zzt @ Izt | Zzk @ Izk | Izk | I _r | @ Vr | I _{zs} |
| | | (V) | (mA) | (Ω) | (Ω) | (mA) | (μA) | (V) | (mA) |
| 1SMA4741-GT3 | 741B | 11 | 23 | 8.0 | 700 | 0.25 | 5.0 | 8.4 | 414 |
| 1SMA4742-GT3 | 742B | 12 | 21 | 9.0 | 700 | 0.25 | 5.0 | 9.1 | 380 |
| 1SMA4743-GT3 | 743B | 13 | 19 | 10 | 700 | 0.25 | 5.0 | 9.9 | 344 |
| 1SMA4744-GT3 | 744B | 15 | 17 | 14 | 700 | 0.25 | 5.0 | 11.4 | 305 |
| 1SMA4745-GT3 | 745B | 16 | 15.5 | 16 | 700 | 0.25 | 5.0 | 12.2 | 285 |
| 1SMA4746-GT3 | 746B | 18 | 14 | 20 | 750 | 0.25 | 5.0 | 13.7 | 250 |
| 1SMA4747-GT3 | 747B | 20 | 12.5 | 22 | 750 | 0.25 | 5.0 | 15.2 | 225 |
| 1SMA4748-GT3 | 748B | 22 | 11.5 | 23 | 750 | 0.25 | 5.0 | 16.7 | 205 |
| 1SMA4749-GT3 | 749B | 24 | 10.5 | 25 | 750 | 0.25 | 5.0 | 18.2 | 190 |
| 1SMA4750-GT3 | 750B | 27 | 9.5 | 35 | 750 | 0.25 | 5.0 | 20.6 | 170 |
| 1SMA4751-GT3 | 751B | 30 | 8.5 | 40 | 1000 | 0.25 | 5.0 | 22.8 | 150 |
| 1SMA4752-GT3 | 752B | 33 | 7.5 | 45 | 1000 | 0.25 | 5.0 | 25.1 | 135 |
| 1SMA4753-GT3 | 753B | 36 | 7.0 | 50 | 1000 | 0.25 | 5.0 | 27.4 | 125 |
| 1SMA4754-GT3 | 754B | 39 | 6.5 | 60 | 1000 | 0.25 | 5.0 | 29.7 | 115 |
| 1SMA4755-GT3 | 755B | 43 | 6.0 | 70 | 1500 | 0.25 | 5.0 | 32.7 | 110 |
| 1SMA4756-GT3 | 756B | 47 | 5.5 | 80 | 1500 | 0.25 | 5.0 | 35.8 | 95 |
| 1SMA4757-GT3 | 757B | 51 | 5.0 | 95 | 1500 | 0.25 | 5.0 | 38.8 | 90 |
| 1SMA4758-GT3 | 758B | 56 | 4.5 | 110 | 2000 | 0.25 | 5.0 | 42.6 | 80 |
| 1SMA4759-GT3 | 759B | 62 | 4.0 | 125 | 2000 | 0.25 | 5.0 | 47.1 | 70 |
| 1SMA4760-GT3 | 760B | 68 | 3.7 | 150 | 2000 | 0.25 | 5.0 | 51.7 | 65 |
| 1SMA4761-GT3 | 761B | 75 | 3.3 | 175 | 2000 | 0.25 | 5.0 | 56.0 | 60 |
| 1SMA4762-GT3 | 762B | 82 | 3.0 | 200 | 3000 | 0.25 | 5.0 | 62.2 | 55 |
| 1SMA4763-GT3 | 763B | 91 | 2.8 | 250 | 3000 | 0.25 | 5.0 | 69.2 | 50 |
| 1SMA4764-GT3 | 764B | 100 | 2.5 | 350 | 3000 | 0.25 | 5.0 | 76.0 | 45 |

- Note: 1. Type numbers listed have standard tolerance on the nominal Zener voltage of $\pm 5\%$.
 2. Measured under thermal equilibrium and DC (Izt) test conditions.
 3. The Zener impedance is derived from the 60Hz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (Izt or Izk) is superimposed on Izt or Izk. Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.



ORDERING INFORMATION

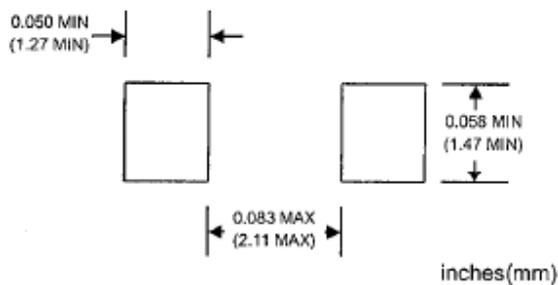
| Product No.♦ | Package Type | Shipping Quantity |
|--------------|--------------|-------------------|
| 1SMA47xx-GT3 | SMA | 5000/Tape & Reel |

Products listed in **bold** are Sensitron Preferred devices.

*T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

RECOMMENDED FOOTPRINT





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