



**THE DATASHEET OF  
1SMA4745-GT3TR**

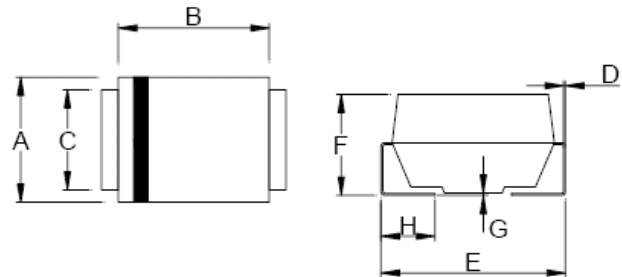




**Technical Data**  
**Data Sheet N0196, Rev. -**

**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<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1) Derate Above 25°C	P <sub>d</sub>	1.0 8.0	W mW/°C
Forward Voltage @IF = 200mA	V <sub>F</sub>	1.2	V
Non repetitive peak surge power dissipation Tp = 100 μs sq.pulse, Tj = 25°C prior to surge	P <sub>ZSM</sub>	600	W
Thermal Resistance Junction to Ambient (Note 1)	R <sub>θJA</sub>	120	°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-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 <sub>r</sub>	@ Vr	I <sub>zs</sub>
		(V)	(mA)	( $\Omega$ )	( $\Omega$ )	(mA)	( $\mu\text{A}$ )	(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

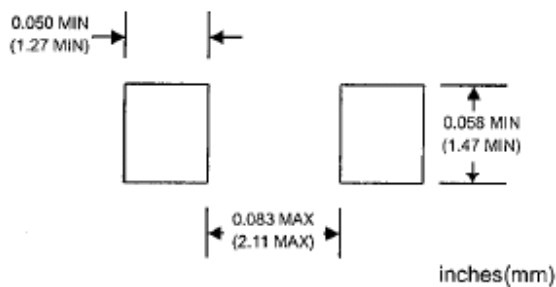
Product No.♦	Package Type	Shipping Quantity
1SMA47xx-GT3	SMA	5000/Tape & Reel

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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