

Technical Data Data Sheet N1992, Rev. A Automotive qualified

# 1SMA4753-A SURFACE MOUNT ZENER DIODE



#### **Features**

- Glass Passivated Die Construction
- 1.0W Power Dissipation
- 36V Nominal Zener Voltage
- 5% Standard Vz Tolerance
- Low Inductance
- Typical IR Less Than 5.0 μ A Above 11V
- Plastic Case Material has UL Flammability Classification Rating 94V-O
- ROHS Compliant
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request
- "-A" suffix is for Automotive qualified

#### **Circuit Diagram**



### **Mechanical Data**

- Case: SMA molded plastic body
- Terminals: Solder Plated, Solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.06 grams

### Maximum Ratings@T<sub>A</sub>=25°C unless otherwise specified

Parameter	Symbol	Value	Units
Power Dissipation (Note 1) Derate Above 25°C	P <sub>D</sub>	1.0 8.0	W mW/°C
Forward Voltage @ I <sub>F</sub> = 200mA	V <sub>F</sub>	1.2	V
Typical Thermal resistance junction to Ambient (Note 1)	R <sub>θJA</sub>	120	°C/W
Operating Junction and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-65 to + 175	°C

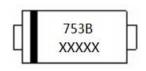
Notes: 1. Valid provided that device terminals are kept at ambient temperature

# **Ordering Information**

Device	Package	Shipping		
1SMA4753-A	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.

## **Marking Diagram**



Where XXXXX is YYWWL

753B = Marking Code YY = Year WW = Week L = Lot Number

Cautions: Molding resin Epoxy resin UL:94V-0

- China Germany Korea Singapore United States
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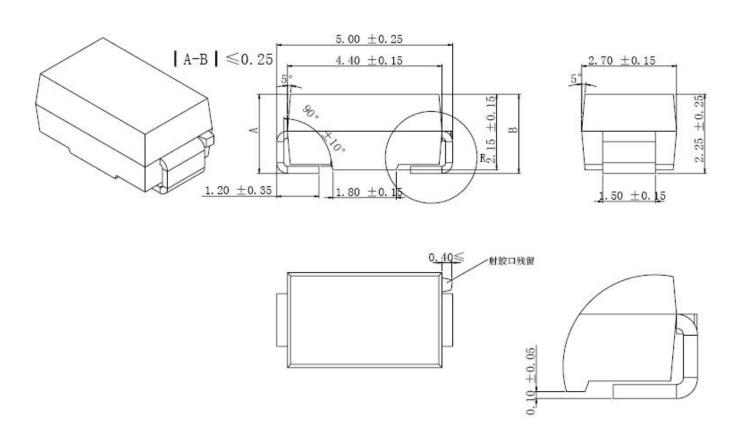
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# **Ratings and Characteristics Curves**

		Nominal Zener Voltage ①	Test Current	Zener Impedence			Leakage Current		Max. Surge Current 8.3ms
Device	Marking Code	'		Max.	Max.		May I @ V		
Code	Vz @ Izτ	I <sub>ZT</sub>	<b>Z</b> zт @ <b>I</b> zт	Zzk @ Izk	@ I <sub>ZK</sub>	Max. I <sub>R</sub> @ V <sub>R</sub>	Izs		
		Volts	mA	Ω	Ω	mA	uA	Volts	mA
1SMA4753	753B	36	7	50	1000	0.25	5	27.4	125

Note: 1) Vz Tolerance is ±5%.

## **Mechanical Dimensions SMA (Millimeters)**



Note: The typical height of the SMA package is 2.25 mm.

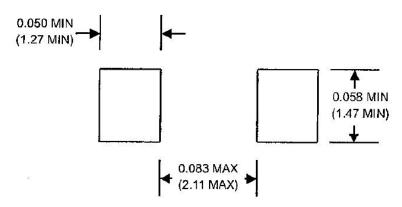
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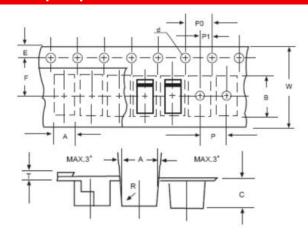


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## Recommended Footprint (Inches/Millimeters)



### **Carrier Tape Specification SMA**



SYMBOL	Millimeters		
STIVIBUL	Min.	Max.	
Α	2.97	3.17	
В	5.70	5.90	
С	2.32	2.52	
d	1.40	1.60	
E	1.40	1.60	
F	5.60	5.70	
Р	3.90	4.10	
P0	3.90	4.10	
P1	1.90	2.10	
Т	0.25	0.35	
W	11.80	12.20	

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