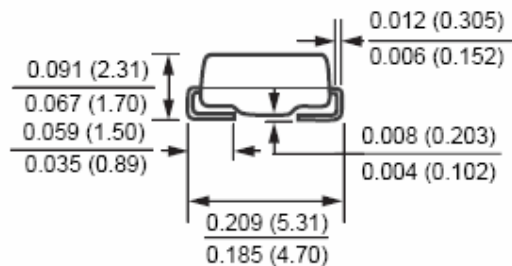
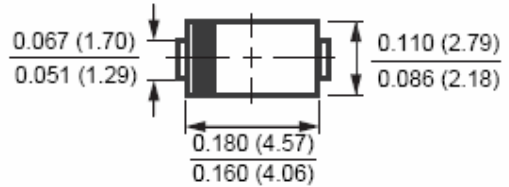


FEATURES

- Glass passivated chip
- Low leakage
- Built-in strain relief
- Low inductance
- High peak reverse power dissipation
- Lead (Pb)-free component
- For use in stabilizing and clipping circuits with high power



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any

RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

| Parameter | Symbol | Value | UNIT |
|--|------------------|---------------|-------|
| DC Power Dissipation at TL = 50 °C (Note1) | P _D | 1.0 | Watts |
| Peak pulse current wih a 10/1000µs waveform | V _F | 1.2 | Volts |
| Maximum Thermal Resistance Junction to Ambient Air (Note2) | R _{θJA} | 170.0 | K/W |
| Junction Temperature Range | T _J | - 55 to + 175 | °C |
| Storage Temperature Range | T _{STG} | - 55 to + 175 | °C |

Note:

- (1) TL = Lead temperature at 3/8 " (9.5mm) from body.
 (2) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.



SMA4728A THRU SMA4764A

PB FREE PRODUCT

1W GLASS PASSIVATED JUNCTION SILICON ZENER DIODE

| TYPE | Vz@IzT | | | IzT | Maximum Zener Impedance | | | Maximum Leakage Current | | Marking Code |
|-----------------------|--------|-------|-------|------|-------------------------|---------|------|-------------------------|------|--------------|
| | Nom.V | Min.V | Max.V | | ZzT@IzT | Zzk@Izk | Izk | IR@VR | | |
| | | | | mA | Ω | Ω | mA | μA | V | |
| 1.0 Watt ZENER | | | | | | | | | | |
| SMA4728A | 3.3 | 3.1 | 3.5 | 76 | 10 | 400 | 1.0 | 100 | 1.0 | 28A |
| SMA4729A | 3.6 | 3.4 | 3.8 | 69 | 10 | 400 | 1.0 | 100 | 1.0 | 29A |
| SMA4730A | 3.9 | 3.7 | 4.1 | 64 | 9.0 | 400 | 1.0 | 50 | 1.0 | 30A |
| SMA4731A | 4.3 | 4.1 | 4.5 | 58 | 9.0 | 400 | 1.0 | 10 | 1.0 | 31A |
| SMA4732A | 4.7 | 4.5 | 4.9 | 53 | 8.0 | 500 | 1.0 | 10 | 1.0 | 32A |
| SMA4733A | 5.1 | 4.8 | 5.4 | 49 | 7.0 | 550 | 1.0 | 10 | 1.0 | 33A |
| SMA4734A | 5.6 | 5.3 | 5.9 | 45 | 5.0 | 600 | 1.0 | 10 | 2.0 | 34A |
| SMA4735A | 6.2 | 5.9 | 6.5 | 41 | 2.0 | 700 | 1.0 | 10 | 3.0 | 35A |
| SMA4736A | 6.8 | 6.5 | 7.1 | 37 | 3.5 | 700 | 1.0 | 10 | 4.0 | 36A |
| SMA4737A | 7.5 | 7.1 | 7.9 | 34 | 4.0 | 700 | 0.5 | 10 | 5.0 | 37A |
| SMA4738A | 8.2 | 7.8 | 8.6 | 31 | 4.5 | 700 | 0.5 | 10 | 6.0 | 38A |
| SMA4739A | 9.1 | 8.6 | 9.6 | 28 | 5.0 | 700 | 0.5 | 10 | 7.0 | 39A |
| SMA4740A | 10.0 | 9.5 | 10.5 | 25 | 7.0 | 700 | 0.25 | 10 | 7.6 | 40A |
| SMA4741A | 11.0 | 10.5 | 11.6 | 23 | 8.0 | 700 | 0.25 | 5.0 | 8.4 | 41A |
| SMA4742A | 12.0 | 11.4 | 12.6 | 21 | 9.0 | 700 | 0.25 | 5.0 | 9.1 | 42A |
| SMA4743A | 13.0 | 12.4 | 13.7 | 19 | 10 | 700 | 0.25 | 5.0 | 9.9 | 43A |
| SMA4744A | 15.0 | 14.3 | 15.8 | 17 | 14 | 700 | 0.25 | 5.0 | 11.4 | 44A |
| SMA4745A | 16.0 | 15.2 | 16.8 | 15.5 | 16 | 700 | 0.25 | 5.0 | 12.2 | 45A |
| SMA4746A | 18.0 | 17.1 | 18.9 | 14.0 | 20 | 750 | 0.25 | 5.0 | 13.7 | 46A |
| SMA4747A | 20.0 | 19.0 | 21.0 | 12.5 | 22 | 750 | 0.25 | 5.0 | 15.2 | 47A |
| SMA4748A | 22.0 | 20.9 | 23.1 | 11.5 | 23 | 750 | 0.25 | 5.0 | 16.7 | 48A |
| SMA4749A | 24.0 | 22.8 | 25.2 | 10.5 | 25 | 750 | 0.25 | 5.0 | 18.2 | 49A |
| SMA4750A | 27.0 | 25.7 | 28.4 | 9.5 | 35 | 750 | 0.25 | 5.0 | 20.6 | 50A |
| SMA4751A | 30.0 | 28.5 | 31.5 | 8.5 | 40 | 1000 | 0.25 | 5.0 | 22.8 | 51A |
| SMA4752A | 33.0 | 31.4 | 34.7 | 7.5 | 45 | 1000 | 0.25 | 5.0 | 25.1 | 52A |
| SMA4753A | 36.0 | 34.2 | 37.8 | 7.0 | 50 | 1000 | 0.25 | 5.0 | 27.4 | 53A |
| SMA4754A | 39.0 | 37.1 | 41.0 | 6.5 | 60 | 1000 | 0.25 | 5.0 | 29.7 | 54A |
| SMA4755A | 43.0 | 40.9 | 45.2 | 6.0 | 70 | 1500 | 0.25 | 5.0 | 32.7 | 55A |
| SMA4756A | 47.0 | 44.7 | 49.4 | 5.5 | 80 | 1500 | 0.25 | 5.0 | 35.8 | 56A |
| SMA4757A | 51.0 | 48.5 | 53.6 | 5.0 | 95 | 1500 | 0.25 | 5.0 | 38.8 | 57A |
| SMA4758A | 56.0 | 53.2 | 58.8 | 4.5 | 110 | 2000 | 0.25 | 5.0 | 42.6 | 58A |
| SMA4759A | 62.0 | 58.9 | 65.1 | 4.0 | 125 | 2000 | 0.25 | 5.0 | 47.1 | 59A |
| SMA4760A | 68.0 | 64.6 | 71.4 | 3.7 | 150 | 2000 | 0.25 | 5.0 | 51.7 | 60A |
| SMA4761A | 75.0 | 71.3 | 78.8 | 3.3 | 175 | 2000 | 0.25 | 5.0 | 56.0 | 61A |
| SMA4762A | 82.0 | 77.9 | 86.1 | 3.0 | 200 | 3000 | 0.25 | 5.0 | 62.2 | 62A |
| SMA4763A | 91.0 | 86.5 | 95.6 | 2.8 | 250 | 3000 | 0.25 | 5.0 | 69.2 | 63A |
| SMA4764A | 100.0 | 95.0 | 105.0 | 2.5 | 350 | 3000 | 0.25 | 5.0 | 76.0 | 64A |



**CHENG-YI
ELECTRONIC**

SMA4728A THRU SMA4764A

PB FREE PRODUCT

1W GLASS PASSIVATED JUNCTION SILICON ZENER DIODE

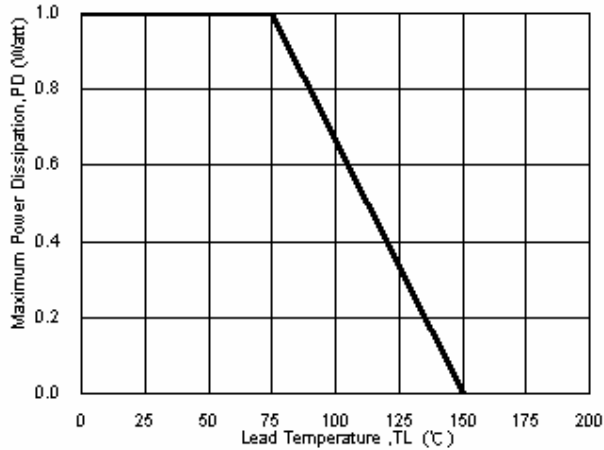


Fig. 1 - Power Temperature Derating Curve

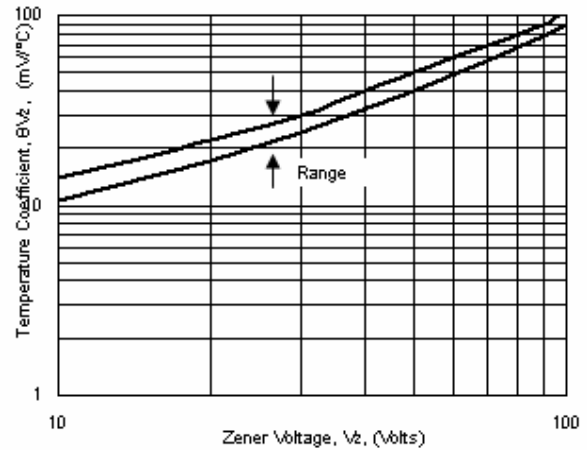


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

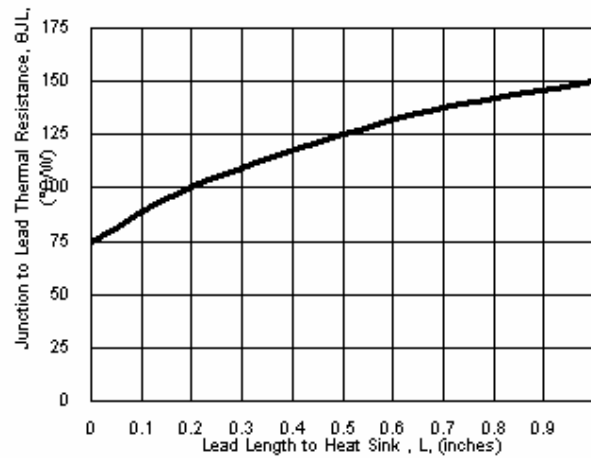


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

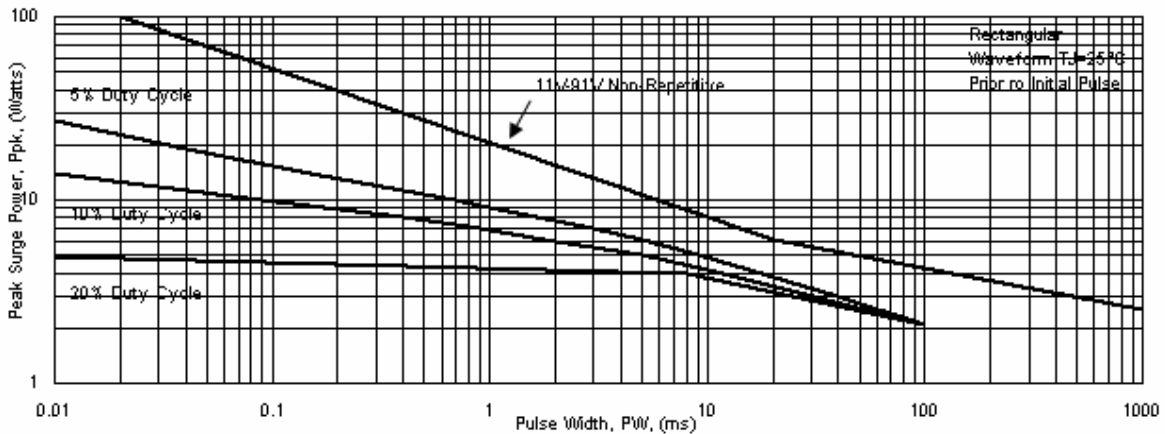


FIG.4 - Maximum Surge Power