



SILICON PLANAR ZENER DIODE

FEATURES

- * Zener Voltage Range 3.3 to 56 Volts
- * DO-41 Package (JEDEC)
- * Through-Hole Device Type Mounting
- * Hermetically Sealed Glass
- * Compression Bonded Construction
- * All external surfaces are corrosion resistant and leads are readily solderable

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.



DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (@ TA = 25°C unless otherwise noted)

| RATINGS | SYMBOL | VALUE | UNITS |
|---------------------------|------------------|-------------|-------|
| Power Dissipation | P _D | 1000 | mW |
| Junction Temperature | T _J | 200 | °C |
| Storage Temperature Range | T _{stg} | -65 to +200 | °C |

Note: 1."Fully RoHS Compliant", "100% Sn Plating (Pb-free)".

2.Standard tolerance : Vz +/- 5%

2012-3
Rev.A

ELECTRICAL CHARACTERISTICS (@TA=25°C unless otherwise specified)

| TYPE | V _{ZT} @I _{ZT} (Volts) Nominal | I _{ZT} (mA) | Z _{ZT} @I _{ZT} (Ω) MAX | I _{ZK} (mA) | Z _{Zk} @I _{Zk} (Ω) MAX | I _R @V _R (mA) MAX | V _R (Volts) |
|---------|--------------------------------------------------------|-------------------------|------------------------------------------------|-------------------------|------------------------------------------------|-----------------------------------------------|---------------------------|
| 1N4728A | 3.3 | 76 | 10 | 1 | 400 | 100 | 1 |
| 1N4729A | 3.6 | 69 | 10 | 1 | 400 | 100 | 1 |
| 1N4730A | 3.9 | 64 | 9 | 1 | 400 | 50 | 1 |
| 1N4731A | 4.3 | 58 | 9 | 1 | 400 | 10 | 1 |
| 1N4732A | 4.7 | 53 | 8 | 1 | 500 | 10 | 1 |
| 1N4733A | 5.1 | 49 | 7 | 1 | 550 | 10 | 1 |
| 1N4734A | 5.6 | 45 | 5 | 1 | 600 | 10 | 2 |
| 1N4735A | 6.2 | 41 | 2 | 1 | 700 | 10 | 3 |
| 1N4736A | 6.8 | 37 | 3.5 | 1 | 700 | 10 | 4 |
| 1N4737A | 7.5 | 34 | 4 | 0.5 | 700 | 10 | 5 |
| 1N4738A | 8.2 | 31 | 4.5 | 0.5 | 700 | 10 | 6 |
| 1N4739A | 9.1 | 28 | 5 | 0.5 | 700 | 10 | 7 |
| 1N4740A | 10 | 25 | 7 | 0.25 | 700 | 10 | 7.6 |
| 1N4741A | 11 | 23 | 8 | 0.25 | 700 | 5 | 8.4 |
| 1N4742A | 12 | 21 | 9 | 0.25 | 700 | 5 | 9.1 |
| 1N4743A | 13 | 19 | 10 | 0.25 | 700 | 5 | 9.9 |
| 1N4744A | 15 | 17 | 14 | 0.25 | 700 | 5 | 11.4 |
| 1N4745A | 16 | 15.5 | 16 | 0.25 | 700 | 5 | 12.2 |
| 1N4746A | 18 | 14 | 20 | 0.25 | 700 | 5 | 13.7 |
| 1N4747A | 20 | 12.5 | 22 | 0.25 | 750 | 5 | 15.2 |
| 1N4748A | 22 | 11.5 | 23 | 0.25 | 750 | 5 | 16.7 |
| 1N4749A | 24 | 10.5 | 25 | 0.25 | 750 | 5 | 18.2 |
| 1N4750A | 27 | 9.5 | 35 | 0.25 | 750 | 5 | 20.6 |
| 1N4751A | 30 | 8.5 | 40 | 0.25 | 1000 | 5 | 22.8 |
| 1N4752A | 33 | 7.5 | 45 | 0.25 | 1000 | 5 | 25.1 |
| 1N4753A | 36 | 7.0 | 50 | 0.25 | 1000 | 5 | 27.4 |
| 1N4754A | 39 | 6.5 | 60 | 0.25 | 1000 | 5 | 29.7 |
| 1N4755A | 43 | 6.0 | 70 | 0.25 | 1500 | 5 | 32.7 |
| 1N4756A | 47 | 5.5 | 80 | 0.25 | 1500 | 5 | 35.8 |
| 1N4757A | 51 | 5.0 | 95 | 0.25 | 1500 | 5 | 38.8 |
| 1N4758A | 56 | 4.5 | 110 | 0.25 | 2000 | 5 | 42.6 |

RATING AND CHARACTERISTICS CURVES (1N4728A-1N4758A)



Figure1 Power Dissipation vs Ambient Temperature



Figure2 Typical Thermal Resistance vs Lead Length



Figure3 Junction Capacitance vs Zener Voltage

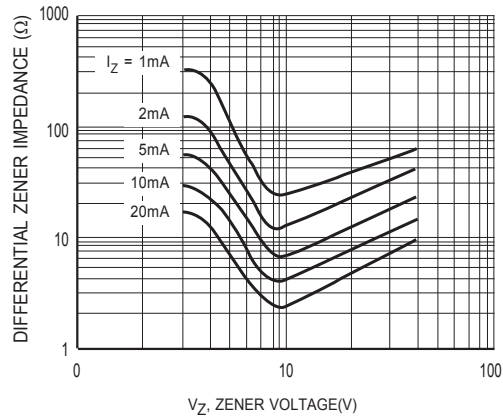


Figure4 Typical Zener Impedance vs Zener Voltage

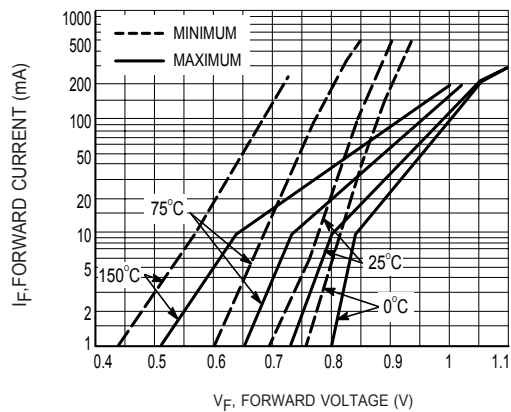


Figure5 Typical Forward Characteristics

Attachment information about 1N47XXA

1. Internal Circuit



2. Marking on the body

