



SURFACE MOUNT GALSS PASSIVATED ZENER DIODE

MZ1.0PA6.2-41 THRU MZ1.0PA91V-2.0

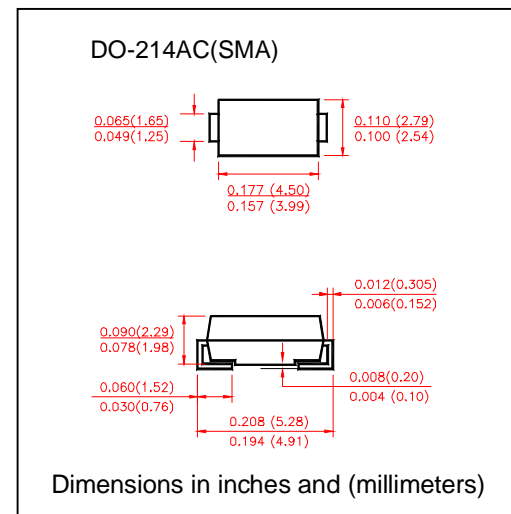
Zener Voltage **6.2 to 91.0 Volts**
Standby State Power **1.0 Watt**

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Glass passivated chip junction
- Low Zener impedance
- Low regulation factor
- High temperature soldering guaranteed:
250°C/10 seconds at terminals

MECHANICAL DATA

- Case: JEDEC DO214AC molded plastic over passivated junction
- Terminals: Solder plated, solderable per MIL-STD-750 Method 2026
- Polarity: Color band denotes positive end (cathode)
- Mounting Position: Any
- Weight: 0.002 ounce, 0.064 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified

OPERATING JUNCTION AND STOPAGE TEMPERATURE RANGE: T_J, T_{STG}: -55°C to +150°C

| Type | Device Marking Code | Nominal Zener Voltage at I _{ZT} (Note1) (volts) | Test Current I _{ZT} (mA) | Maximum dynamic Impedance | | | Maximum Reverse Leakage current | | Maximum Surge Current (note2) I _{RM} (mApk) | Maximum Forward Voltage Ar 200mA V _F (Volts) |
|-----------------|---------------------|----------------------------------------------------------|-----------------------------------|--------------------------------------------|--------------------------------------------|------------------------------|---------------------------------|------------------------|------------------------------------------------------|---------------------------------------------------------|
| | | | | Z Z _T at I _{ZT} (Ohms) | Z Z _K at I _{ZK} (Ohms) | (Note1) I _{ZK} (mA) | I _R (μA) | V _R (Volts) | | |
| MZ1.0PA6V2-41 | 6V2-41 | 6.2 | 41.0 | 2.0 | 700 | 1 | 50 | 3 | 730 | 1.2 |
| MZ1.0PA6V8-38 | 6V8-38 | 6.8 | 37.0 | 3.5 | 700 | 1 | 20 | 4 | 660 | 1.2 |
| MZ1.0PA7V5-34 | 7V5-34 | 7.5 | 34.0 | 4.0 | 700 | 0.5 | 10 | 5 | 605 | 1.2 |
| MZ1.0PA8V2-31 | 8V2-31 | 8.2 | 31.0 | 4.5 | 700 | 0.5 | 10 | 6 | 550 | 1.2 |
| MZ1.0PA9V1-28 | 9V1-28 | 9.1 | 28.0 | 5.0 | 700 | 0.5 | 10 | 7 | 500 | 1.2 |
| MZ1.0PA10V-25 | 10V-25 | 10 | 25.0 | 7.0 | 700 | 0.25 | 10 | 7.6 | 454 | 1.2 |
| MZ1.0PA11V-23 | 11V-23 | 11 | 23.0 | 8.0 | 700 | 0.25 | 5 | 8.4 | 414 | 1.2 |
| MZ1.0PA12V-21 | 12V-21 | 12 | 21.0 | 9.0 | 700 | 0.25 | 5 | 9.1 | 380 | 1.2 |
| MZ1.0PA13V-19 | 13V-19 | 13 | 19.0 | 10.0 | 700 | 0.25 | 5 | 9.9 | 344 | 1.2 |
| MZ1.0PA15V-17 | 15V-17 | 15 | 17.0 | 14.0 | 700 | 0.25 | 5 | 11.4 | 305 | 1.2 |
| MZ1.0PA16V-15.5 | 16V-15.5 | 16 | 15.5 | 16.0 | 700 | 0.25 | 5 | 12.2 | 285 | 1.2 |
| MZ1.0PA18V-14 | 18V-14 | 18 | 14.0 | 20.0 | 750 | 0.25 | 5 | 13.7 | 250 | 1.2 |
| MZ1.0PA20V-12.5 | 20V-12.5 | 20 | 12.5 | 22.0 | 750 | 0.25 | 5 | 15.2 | 225 | 1.2 |
| MZ1.0PA22V-11.5 | 22V-11.5 | 22 | 11.5 | 23.0 | 750 | 0.25 | 5 | 16.7 | 205 | 1.2 |
| MZ1.0PA24V-10.5 | 24V-10.5 | 24 | 10.5 | 25.0 | 750 | 0.25 | 5 | 18.2 | 190 | 1.2 |
| MZ1.0PA27V-9.5 | 27V-9.5 | 27 | 9.5 | 35.0 | 750 | 0.25 | 5 | 20.6 | 170 | 1.2 |
| MZ1.0PA30V-8.5 | 30V-8.5 | 30 | 8.5 | 40.0 | 1000 | 0.25 | 5 | 22.8 | 150 | 1.2 |
| MZ1.0PA33V-7.5 | 33V-7.5 | 33 | 7.5 | 45.0 | 1000 | 0.25 | 5 | 25.1 | 135 | 1.2 |
| MZ1.0PA36V-7.0 | 36V-7.0 | 36 | 7.0 | 50.0 | 1000 | 0.25 | 5 | 27.4 | 125 | 1.2 |
| MZ1.0PA39V-6.5 | 39V-6.5 | 39 | 6.5 | 60.0 | 1000 | 0.25 | 5 | 29.7 | 115 | 1.2 |
| MZ1.0PA43V-6.0 | 43V-6.0 | 43 | 6.0 | 70.0 | 1500 | 0.25 | 5 | 32.7 | 110 | 1.2 |
| MZ1.0PA47V-5.5 | 47V-5.5 | 47 | 5.5 | 80.0 | 1500 | 0.25 | 5 | 35.8 | 95 | 1.2 |
| MZ1.0PA51V-5.0 | 51V-5.0 | 51 | 5.0 | 95.0 | 1500 | 0.25 | 5 | 38.8 | 90 | 1.2 |
| MZ1.0PA56V-4.5 | 56V-4.5 | 56 | 4.5 | 110.0 | 2000 | 0.25 | 5 | 42.6 | 80 | 1.2 |
| MZ1.0PA62V-4.0 | 62V-4.0 | 62 | 4.0 | 125.0 | 2000 | 0.25 | 5 | 47.1 | 70 | 1.2 |
| MZ1.0PA48V-3.7 | 48V-3.7 | 68 | 3.7 | 150.0 | 2000 | 0.25 | 5 | 51.7 | 65 | 1.2 |
| MZ1.0PA75V-3.3 | 75V-3.3 | 75 | 3.3 | 175.0 | 2000 | 0.25 | 5 | 56 | 60 | 1.2 |
| MZ1.0PA82V-3.0 | 82V-3.0 | 82 | 3.0 | 200.0 | 3000 | 0.25 | 5 | 62.2 | 55 | 1.2 |
| MZ1.0PA91V-2.0 | 91V-2.0 | 91 | 2.0 | 250.0 | 3000 | 0.25 | 5 | 69.2 | 50 | 1.2 |

Notes:

1. Standard voltage tolerance is ±5%, suffix A ±10%
2. Surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on I_{ZT} per JEDEC Method
3. Maximum steady state power dissipation is 1.0 watt at T_r = 75°C



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RATING AND CHARACTERISTIC CURVES MZ1.0PA6.2-41 THRU MZ1.0PA91V-2.0

