

T-01-15

BY126MGP, BY127MGP/BY226MGP, BY227MGP
 MINIATURE GLASS PASSIVATED JUNCTION PLASTIC RECTIFIER



GENERAL INSTRUMENT



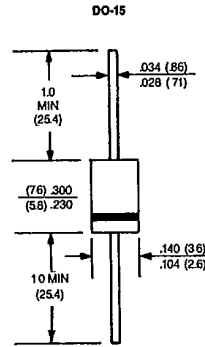
FEATURES

- High temperature metallurgically bonded constructed rectifiers
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated junction in DO-15 package
- 1.5 ampere operation at $T_A = 55^\circ\text{C}$ with no thermal runaway
- Typical I_n less than $1 \mu\text{A}$
- Exceeds environmental standards of MIL-STD-19500
- High temperature soldering guaranteed $350^\circ\text{C}/10$ seconds/.375", (9.5mm) lead length at 5 lbs., (2.3kg) tension

MECHANICAL DATA

Case: Molded plastic over glass
 Terminals: Axial leads, solderable per MIL-STD-202, Method 208
 Polarity: Color band denotes cathode
 Mounting position: Any
 Weight: 0.015 ounce, 0.4 gram

VOLTAGE RANGE
 650 and 1250 Volts
CURRENT
 1.75 and 2.0 Amperes



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 50 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

| | BY126MGP | BY127MGP | BY226MGP | BY227MGP | UNITS |
|---|----------|----------|-------------|----------|------------------|
| Maximum Recurrent Peak Reverse Voltage | 650 | 1250 | 650 | 1250 | V_{RRM} |
| Maximum RMS Voltage | 455 | 875 | 455 | 875 | V_{RMS} |
| Maximum DC Blocking Voltage | 650 | 1250 | 650 | 1250 | V_{DC} |
| Maximum Average Forward Rectified Current .375", (9.5mm) Lead Length at $T_A = 55^\circ\text{C}$ | 1.75 | | 2.0 | | A_{AV} |
| Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method) | 50 | | 60 | | Apk |
| Maximum Instantaneous Forward Voltage at 5.0A | | | 1.5 | | Vpk |
| Maximum Reverse Current at Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$ | | | 5.0 | | μA |
| Maximum Full Load Reverse Current, Full Cycle Average, .375", 9.5mm Lead Length at $T_A = 55^\circ\text{C}$ | | | 100 | | μA |
| Typical Junction Capacitance (Note 1) | | | 25 | | pF |
| Typical Reverse Recovery Time (Note 2) | | | 2.0 | | μS |
| Operating and Storage Temperature Range T_J, T_{STG} | | | -65 to +175 | | $^\circ\text{C}$ |

NOTES:
 1. Measured at 1.0 MHz and applied reverse voltage of 4.0VDC.
 2. Measured with $I_F = .5\text{A}$, $I_n = 1\text{A}$, $I_{RR} = .25\text{A}$.

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RATING AND CHARACTERISTIC CURVES
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