

Standard Recovery Rectifiers

Qualified per MIL-PRF-19500/228

DESCRIPTION:

This voidless hermetically sealed standard recovery rectifier diode series is military qualified per MIL-PRF-19500/228 and is targeted for space, commercial and military aircraft, military vehicles, shipboard markets and all high reliability applications.

FEATURES / BENEFITS:

- ✓ Hermetic, non-cavity glass package
- ✓ Category I Metallurgically bonded
- ✓ Parts are hot solder dipped
- ✓ JAN/ JANTX/ JANTXV available per MIL-PRF-19500/228

MAXIMUM RATINGS

- ✓ Operating and Storage Temperature: -65°C to +175°C
- ✓ Thermal Resistance: 38°C (junction to lead)
- ✓ Forward surge current: 30A @ 8.3 ms half-sine

ELECTRICAL CHARACTERISTICS

| TYPE NUMBER | PEAK INVERSE VOLTAGE | AVG RECTIFIED CURRENT | MAXIMUM REVERSE CURRENT @ PIV | | MAX. PEAK FORWARD VOLTAGE (PULSED) $V_F @ 1A$ | MAXIMUM SURGE CURRENT ¹ I_{FSM} | MAXIMUM REVERSE RECOVERY TIME ² T_{rr} |
|-------------|----------------------|-----------------------|-------------------------------|-------|---|--|---|
| | | Amps | 25°C | 150°C | | | |
| | Volts | 55°C | 25°C | 150°C | V | Amps | nsec |
| 1N3611 | 200 | 1.0 | 1.0 | 300 | 1.1 | 30 | 5000 |
| 1N3612 | 400 | | | | | | |
| 1N3613 | 600 | | | | | | |
| 1N3614 | 800 | | | | | | |
| 1N3957 | 1000 | | | | | | |

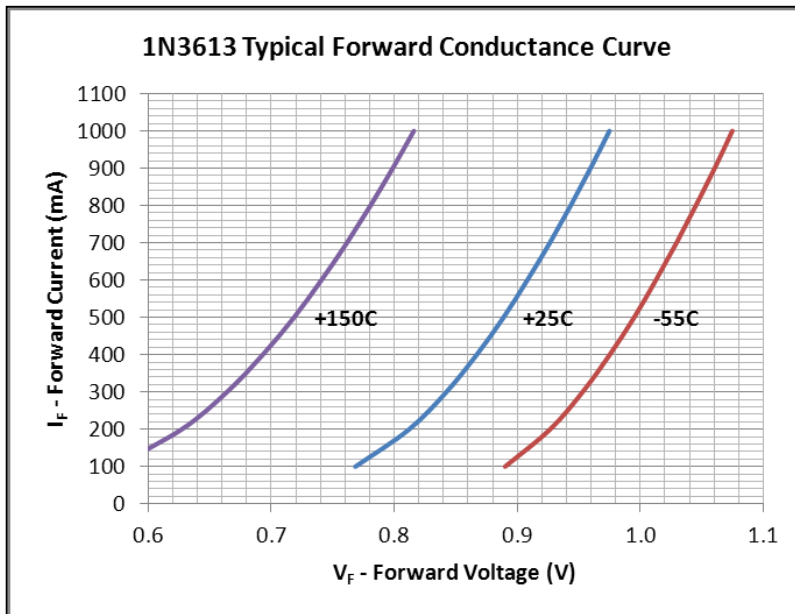
Note 1: $I_o = 1A$, 8ms surge

Note 2: $I_F=0.5A$, $I_{rm}=1A$, $I_{r(REC)}=.250A$

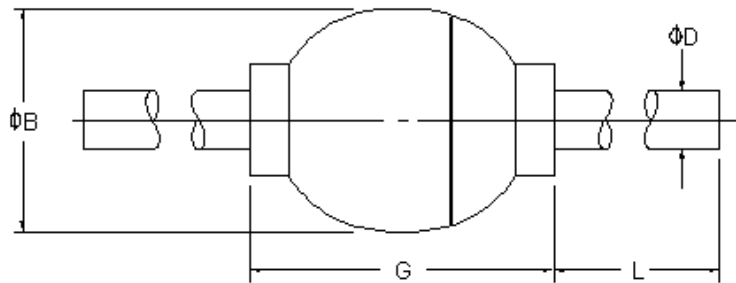
*Sensitron equivalent diodes are manufactured and screened to MIL-PRF-19500 flow and guidelines starting from wafer fabrication through assembly and testing using our internal specification.

TECHNICAL DATA
DATA SHEET 128, REV. A.1

GRAPHS



PACKAGE DIMENSIONS (inches/mm)



| PACKAGE STYLE | DIMENSIONS - INCHES / MILLIMETERS | | | |
|---------------|-----------------------------------|----------------------|------------------------|-----------------------|
| | ϕB | ϕD | G | L |
| 101 | .060/.110 1.52/2.79 | .025/.034 .64/.86 | .140/.205 3.56/5.21 | .60/1.50 15.2/38.1 |

PKG. 101

Note: The cathode side is marked with a dark colored band on the diode body.

**TECHNICAL DATA
DATA SHEET 128, REV. A.1**

PART ORDERING INFORMATION

The following part numbers can be screened and tested to the military screening flow. The parts are marked in accordance with the testing performed, example:

| Sensitron Screening Level | *Part Number-- Leaded Package (example for 1N3611) |
|----------------------------------|---|
| 1N | 1N3611 |
| JAN | JAN1N3611 |
| SJ | SJ3611 |
| JANTX | JANTX1N3611 |
| SX | SX3611 |
| JANTXV | JANTXV1N3611 |
| SV | SV3611 |

*Parts can also be ordered Tape & Reel

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