

## 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
- ✓ All devices are 100% hot solder dipped
- ✓ JAN/ JANTX/ JANTXV available per MIL-PRF-19500/228
- ✓ "JANS Plus" removes atypical/out of family  $V_F$

### 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 <sup>1</sup> $I_{FSM}$	MAXIMUM REVERSE RECOVERY TIME <sup>2</sup> $T_{rr}$
		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						

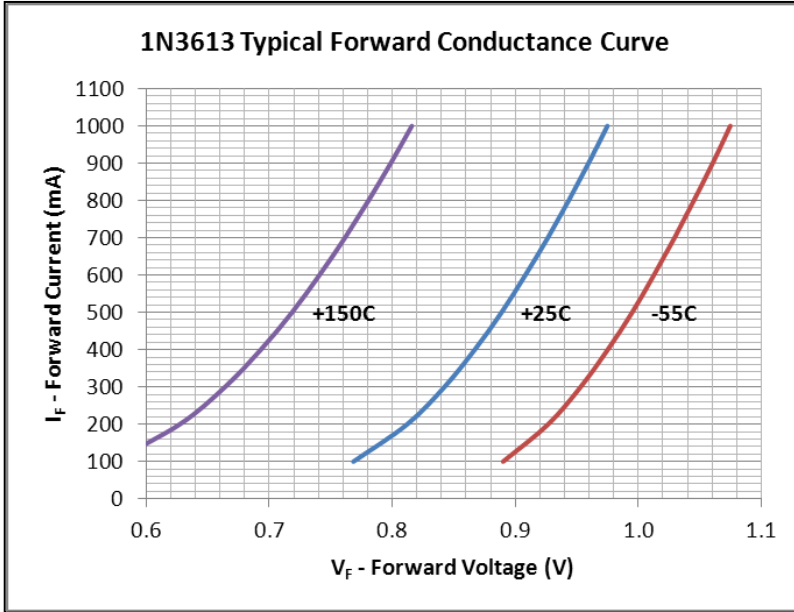
Note 1:  $I_o = 1A$ , 8ms surge

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

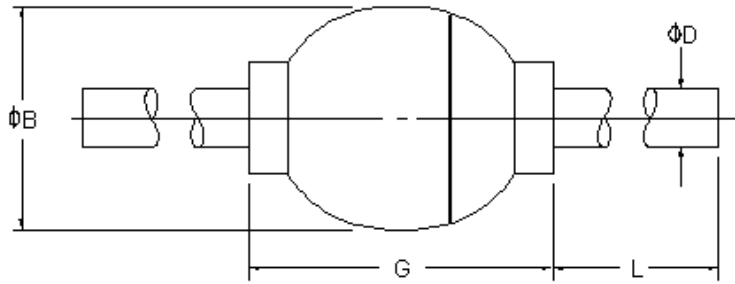
\*Sensitron equivalent diodes are manufactured and screened to MIL-PRF-19500 flow and guidelines starting from wafer fabrication through assembly and testing using our internal specification.

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

**GRAPHS**



**PACKAGE DIMENSIONS (inches/mm)**



PACKAGE STYLE	DIMENSIONS - INCHES / MILLIMETERS			
	$\phi B$	$\phi D$	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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