

1N4245 thru 1N4249

1A STANDARD RECOVERY RECTIFIERS

TECHNICAL DATA DATA SHEET 5083, REV. A.3

AVAILABLE AS 1N, JAN, JANTX, JANTXV JAN EQUIVALENT\* SJ\*, SX\*, SV\*

✓ Operating and Storage Temperature: -65°C to

✓ Thermal Resistance: 42 °C (junction to lead)

✓ Forward surge current: 25A @ 8.3 ms half-

# **1A Standard Recovery Rectifiers**

Qualified per MIL-PRF-19500/286

## **DESCRIPTION:**

This voidless hermetically sealed standard recovery rectifier diode series is military qualified per MIL-PRF-19500/286 and is targeted for commerical and military aircraft, military vehicles, shipboard markets and all high reliability applications.

**MAXIMUM RATINGS** 

+175°C

sine

### **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-19500/286
- ✓ JANS Plus removes atypical/out of family V<sub>F</sub>

# **ELECTRICAL CHARACTERISTICS**

#### TYPE PEAK AVG MAXIMUM MAX. PEAK MAXIMUM MAXIMUM NUMBER INVERSE RECTIFIED REVERSE FORWARD SURGE REVERSE CURRENT<sup>1</sup> RECOVERY VOLTAGE CURRENT CURRENT VOLTAGE TIME<sup>2</sup> @ PIV (PULSED) I<sub>FSM</sub> V<sub>F</sub> @ 3A Trr Amps μAmps Volts 55°C 25°C 150°C V Amps nsec 200 1N4245/US 1N4246/US 400 1N4247/US 600 1.0 1.0 150 1.3 25 5000 1N4248/US 800 1N4249/US 1000

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

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

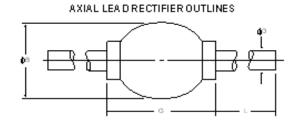
\*Sensitron **space equivalent diodes** are manufactured and screened to MIL-PRF-19500 flow and guidelines starting from wafer fabrication through assembly and testing using our internal specification.



### 1A STANDARD RECOVERY RECTIFIERS

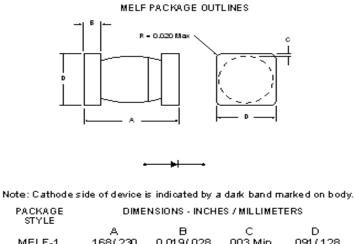
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### PACKAGE DIMENSIONS (inches/mm)



Note: Cathode side of device is indicated by a dark band marked on body.

PACKAGE STYLE	DIMENSIONS - INCHES / MILLIMETERS				
103	<b>∮⊟</b>	¢D	G	L	
	.065/.150	.0277.033	.140/.250	1.0/1.50	
	1.65/3.81	.697.84	3.56/6.35	25.4/38.1	



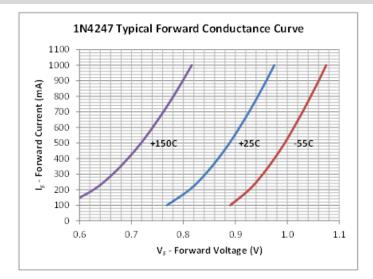
	A	в	C	D
MELF-1	.168/.230	0.019/.028	.003 Min	.091/.128
	4.2/5.9	.48/.72	076 Min	2.311/3.251
	4.2/0.0	.407.12	.010101011	2.011, 0.201

# <u>SENSITRON</u> SEMICONDUCTOR

### 1A STANDARD RECOVERY RECTIFIERS

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### **GRAPHS**:



### PART ORDERING INFORMATION:

The following part numbers can be purchased in either axial or surface mount devices and 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 1N4245)		
1N	1N4245		
JAN	JAN1N4245		
SJ	SJ4245		
JANTX	JANTX1N4245		
SX	SX4245		
JANTXV	JANTXV1N4245		
SV	SV4245		

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