

SENSITRON **SEMICONDUCTOR**

1N5807, 1N5809, 1N5811

**ULTRAFAST RECOVERY
RECTIFIERS**

TECHNICAL DATA
DATA SHEET 127, REV. H.3 Preliminary

AVAILABLE AS
JAN pending
JANTX pending
JANTXV pending
JAN EQUIVALENT (SJ,SX,SV)
JAN S pending

DESCRIPTION:

This voidless hermetically sealed standard recovery rectifier diode series is military qualified per Mil-PRF-19500/477 and is targeted for commercial and military aircraft, military vehicles, shipboard markets and all high reliability applications.

FEATURES / BENEFITS:

- ✓ Hermetic, non-cavity glass package
- ✓ Category I Metallurgically bonded
- ✓ JAN/ JANTX/ JANTXV available per MIL-PRF-19500/477

MAXIMUM RATINGS

- ✓ Operating and Storage Temperature: -65°C to +175°C
- ✓ Thermal Resistance: 22 °C (junction to lead)
- ✓ Thermal Resistance: 6.5 °C (junction to endcap)
- ✓ Forward surge current: 125A @ 8.3 ms half-sine

ELECTRICAL CHARACTERISTICS

TYPE NUMBER	WORKING PEAK REVERSE VOLTAGE	AVG RECTIFIED CURRENT ¹	MAXIMUM REVERSE CURRENT @ PIV		MAX. PEAK FORWARD VOLTAGE (PULSED) V _F @ 1A	MAXIMUM SURGE CURRENT ² I _{FSM}	MAXIMUM REVERSE RECOVERY TIME ³ T _{rr}
		Amps	μAmps				
	Volts	55°C	25°C	125°C	V	Amps	nsec
1N5807/US	50	6.0	5	525	.875	125	30
1N5809/US	100						
1N5811/US	150						

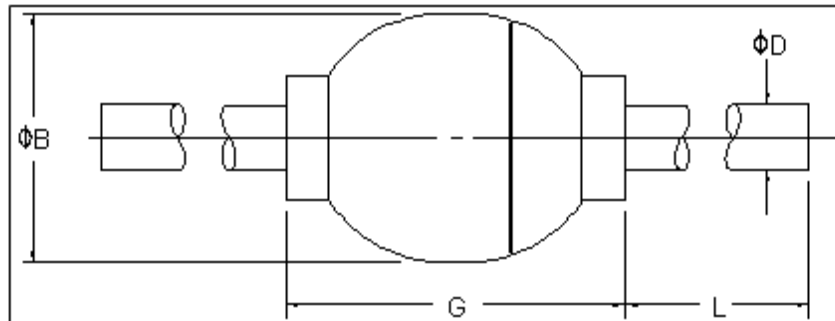
Note 1: T_{EC} = T_L at L=0 or T_{end tab} f or US suffix devices. Derate at 60mA/°C for T_L above 75°C.

Note 2: I_o = 3A, 8.3ms surge

Note 3: I_F=1A, I_{RM}=1A, I_{R(REC)} = .10A

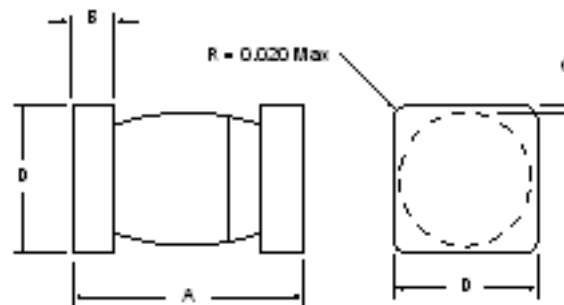
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PACKAGE DIMENSIONS (inches/mm)



PACKAGE STYLE	DIMENSIONS - INCHES (MILLIMETERS)			
	ϕB	ϕD	G	L
304	.115/.142 2.92/3.61	.036/.042 .94/1.07	.130/.300 3.30/7.62	.90/1.30 22.9/33.0

MELF PACKAGE OUTLINES



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

PACKAGE STYLE	DIMENSIONS - INCHES / MILLIMETERS			
	A	B	C	D
MELF-B	.200/.225 5.0/5.8	0.019/.028 .48/.72	.003 Min .076 Min	.137/.148 3.4/3.8

SENSITRON **SEMICONDUCTOR**

1N5614/US thru 1N5622/US

**STANDARD RECOVERY
RECTIFIERS**

TECHNICAL DATA **DATA SHEET 127, REV. H.3 Preliminary**

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