

ULTRAFAST RECTIFIERS

TECHNICAL DATA DATA SHEET 5077, REV. B.1

AVAILABLE AS

1N, JAN, JANTX, JANTXV

JANS

JAN EQUIVALENT*

SJ*, SX*, SV*

SS

Standard Recovery Rectifiers

Qualified per MIL-PRF-19500/590

DESCRIPTION:

This voidless hermetically sealed standard recovery rectifier diode series is military qualified per MIL-PRF-19500/590 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-19500/590

MAXIMUM RATINGS

- ✓ Operating and Storage Temperature: -65°C to +175°C
- ✓ Junction Temperature: -65°C to +155°C

ELECTRICAL CHARACTERISTICS

Rating	Symbol	Condition	Max	Units
WORKING PEAK REVERSE VOLTAGE 1N6626, U, US 1N6627, U ,US 1N6628, U, US 1N6629, U, US 1N6630 ,U, US 1N6631, U, US	V _{RWM}		200 400 600 800 900 1000	Volts
AVERAGE RECTIFIED FORWARD CURRENT 1N6626 thru 1N6628 1N6629 thru 1N6631	Io	T _L = 75 °C	2.3 1.8	Amps
AVERAGE RECTIFIED FORWARD CURRENT 1N6626U, US thru 1N6628U, US 1N6629U, US thru 1N6631U, US	Io	T _{EC} = 110 °C	4.0 2.8	Amps
PEAK FORWARD SURGE CURRENT 1N6626, U, US thru 1N6630,U, US 1N6631, U, US	I _{FSM}	T _p =8.3ms	75 60	A(pk)
MAXIMUM REVERSE CURRENT 1N6626, U, US thru 1N6630,U, US 1N6631, U, US	I _R @ V _{RWM}	T _j = 25 °C	2.0 4.0	μAmps
MAXIMUM REVERSE CURRENT 1N6626, U, US thru 1N6630,U, US 1N6631, U, US	I _R @ V _{RWM}	T _j = 150 °C	500 600	μAmps

^{*}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.

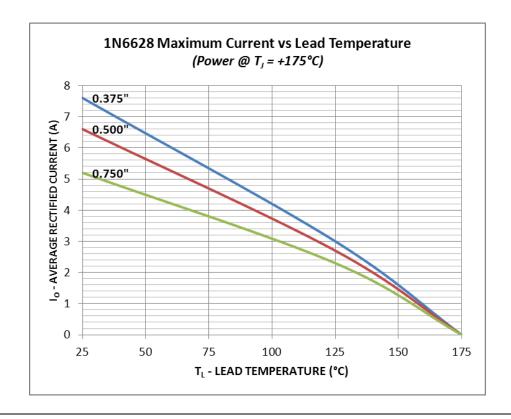




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Rating	Symbol	Condition	Max	Units
MAX. PEAK FORWARD VOLTAGE (PULSED) 1N6626, U, US thru 1N6628,U, US 1N6629,U, US to 1N6630,U, US 1N6631, U, US	V _{FM}	I _F =4A I _F =3A I _F =2A	1.50 1.70 1.95	Volts
PEAK RECOVERY CURRENT 1N6626, U, US thru 1N6628,U, US 1N6629,U, US to 1N6630,U, US 1N6631, U, US	I _{RM}	I _F =2A, 100Α/μ	3.5 4.2 5.0	A(pk)
MAXIMUM REVERSE RECOVERY TIME 1N6626, U, US thru 1N6628,U, US 1N6629,U, US to 1N6630,U, US 1N6631, U, US	T _{rr}	I _F =0.5A I _{RM} =1.0A	30 50 60	ns
FORWARD RECOVERY VOLTAGE 1N6626, U, US thru 1N6628,U, US 1N6629,U, US to 1N6630,U, US 1N6631, U, US	V _{FRM}	I _F =1A t _r =12ns	8 12 20	Volts
THERMAL RESISTANCE (Axial) 1N6626 thru 1N6631	Rθ _{JL}	L=.375	22	°C/W
THERMAL RESISTANCE (MELF) 1N6626U, US thru 1N6631U, US	Rθ _{JC}	L=0	6.5	°C/W

GRAPHS



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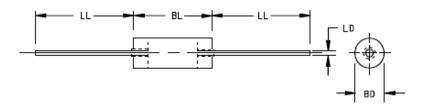


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PACKAGE DIMENSIONS (inches/mm)

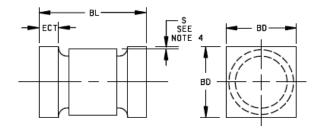
MECHANICAL DIMENSIONS In Inches / (mm)

AXIAL



	Dimensions				
Ltr	Inches		Millimeters		
	Min	Max	Min	Max	Notes
BD	.115	.137	2.92	3.48	4
BL	.130	.300	3.30	7.62	3
LD	.037	.042	0.94	1.07	3
LL	.900	1.300	22.86	33.02	

MELF



Dimensions				
Ltr	1N6626U, US through 1N6631U, US			
	Inches		Millimeters	
	Min	Max	Min	Max
BL	.200	.225	5.08	5.72
BD	.137	.148	3.48	3.76
ECT	.019	.028	0.48	0.71
S	.003		0.08	

SENSITRON SEMICONDUCTOR

1N6626 thru 1N6631

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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 1N6626)
1N	1N6626
JAN	JAN1N6626
SJ	SJ6626
JANTX	JANTX1N6626
SX	SX6626
JANTXV	JANTXV1N6626
SV	SV6626
JANS	JANS1N6626
SS	SS6626

^{*}Parts can also be ordered Tape & Reel

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