

1N6626 thru 1N6631

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, commerical 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	lo	T _L = 75 °C	2.3 1.8	Amps
AVERAGE RECTIFIED FORWARD CURRENT 1N6626U, US thru 1N6628U, US 1N6629U, US thru 1N6631U, US	lo	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}	$T_j = 25 \ ^{\circ}C$	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.

<u>SENSITRON</u> SEMICONDUCTOR

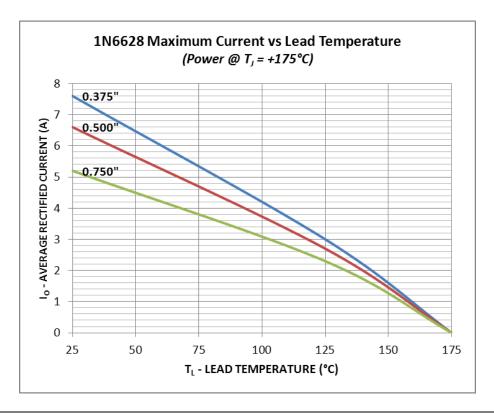
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Rating	Symbol	Condition	Max	Units
MAX. PEAK FORWARD VOLTAGE (PULSED) 1N6626, U, US thru 1N6628,U, US 1N6629,U, US to 1N6630,U, US 1N6631, U, US	V_{FM}	I _F =4A I _F =3A I _F =2A	1.50 1.70 1.95	Volts
PEAK RECOVERY CURRENT 1N6626, U, US thru 1N6628,U, US 1N6629,U, US to 1N6630,U, US 1N6631, U, US	I _{RM}	I⊧=2A, 100A/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	Trr	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	$R\theta_{JL}$	L=.375	22	°C/W
THERMAL RESISTANCE (MELF) 1N6626U, US thru 1N6631U, US	$R\theta_{JC}$	L=0	6.5	°C/W

GRAPHS



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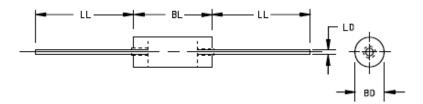
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PACKAGE DIMENSIONS (inches/mm)

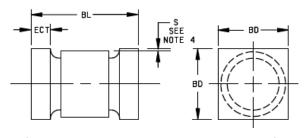
MECHANICAL DIMENSIONS In Inches / (mm)

AXIAL



	Dimensions				
Ltr	Inc	ches 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 S	.019 .003	.028	0.48 0.08	0.71



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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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