

SENSITRON SEMICONDUCTOR

1N6620/U/US thru 1N6625/U/US

ULTRAFAST RECOVERY RECTIFIER

TECHNICAL DATA
DATA SHEET 5089, REV. A.3

AVAILABLE AS
1N, JAN, JANTX, JANTXV
JANS

Ultrafast Recovery Rectifier Qualified per MIL-PRF-19500/585

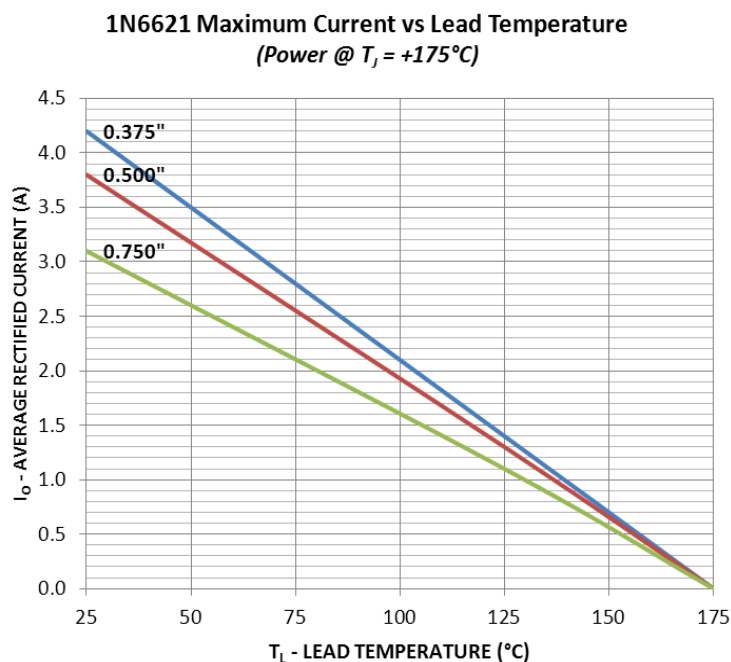
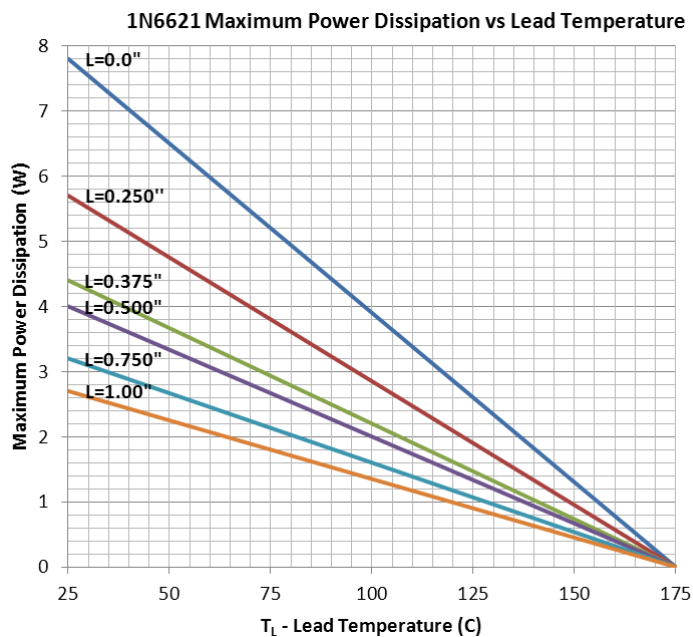
- Hermetic, non-cavity glass package
- Metallurgically bonded
- Operating and storage temperature: -65°C to +175°
- All parts are 100% hot solder dipped
- JAN/ JANTX/ JANTXV available per MIL-PRF-19500/585

MAX. RATINGS / ELECTRICAL CHARACTERISTICS All ratings are at $T_A = 25^\circ\text{C}$ unless otherwise specified.

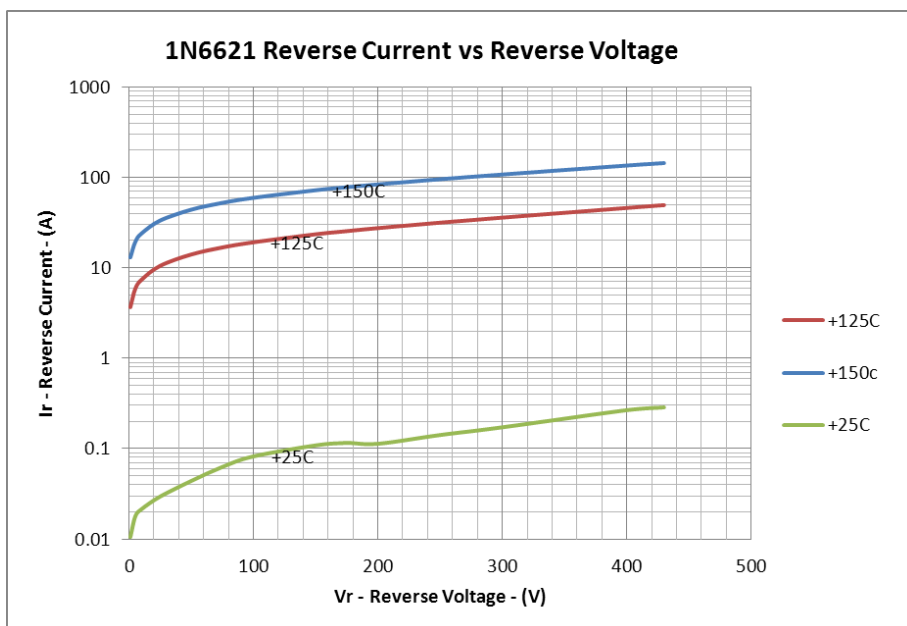
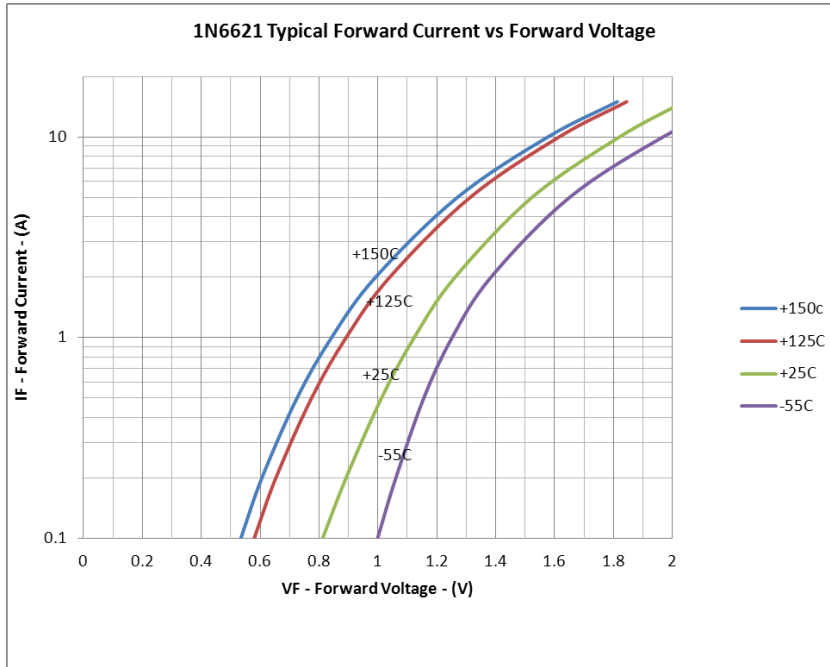
Rating	Symbol	Condition	Max	Units
WORKING PEAK REVERSE VOLTAGE 1N6620, U, US 1N6621, U, US 1N6622, U, US 1N6623, U, US 1N6624, U, US 1N6625, U, US	V_{RWM}		200 400 600 800 900 1000	Volts
AVERAGE RECTIFIED FORWARD CURRENT 1N6620, U, US thru 1N6622, U, US 1N6623, U, US thru 1N6625, U, US	I_o		1.2 1.0	Amps
PEAK FORWARD SURGE CURRENT 1N6620, U, US thru 1N6624, U, US 1N6625, U, US	I_{FSM}	$T_p=8.3\text{ms}$	20 15	A(pk)
MAXIMUM REVERSE CURRENT 1N6620, U, US thru 1N6624, U, US 1N6625, U, US	$I_R @ V_{RWM}$	$T_j = 25^\circ\text{C}$	0.5 1.0	μAmps
MAXIMUM REVERSE CURRENT 1N6620, U, US thru 1N6624, U, US 1N6625, U, US	$I_R @ V_{RWM}$	$T_j = 150^\circ\text{C}$	150 200	μAmps
MAX. PEAK FORWARD VOLTAGE (PULSED) 1N6620, U, US thru 1N6622, U, US 1N6623, U, US & 1N6624, U, US 1N6625, U, US	V_{FM}	$I_F=2.0\text{A}$ $I_F=1.5\mu\text{A}$ $I_F=1.5\mu\text{A}$	1.60 1.80 1.95	Volts
PEAK RECOVERY CURRENT 1N6620, U, US thru 1N6622, U, US 1N6623, U, US & 1N6624, U, US 1N6625, U, US	I_{RM}	$I_F=2\text{A}$, 100A/ μ	3.5 4.2 5.0	A(pk)
MAXIMUM REVERSE RECOVERY TIME 1N6620, U, US thru 1N6622, U, US 1N6623, U, US & 1N6624, U, US 1N6625, U, US	T_{rr}	$I_F=0.5\text{A}$ $I_{RM}=1.0\text{A}$	30 50 60	ns
FORWARD RECOVERY VOLTAGE 1N6620, U, US thru 1N6622, U, US 1N6623, U, US & 1N6624, U, US 1N6625, U, US	V_{FRM}	$I_F=0.5\text{A}$ $t_r=12\text{ns}$	12 18 30	Volts
THERMAL RESISTANCE (Axial) 1N6620 thru 1N6625	$R_{\theta_{JL}}$	$L=.375$	38	$^\circ\text{C/W}$
THERMAL RESISTANCE (MELF) 1N6620U,US thru 1N6625U,US	$R_{\theta_{JEC}}$	$L=0$	13	$^\circ\text{C/W}$

*Sensitron equivalent diodes are manufactured and screened to MIL-PRF-19500 flow and guidelines starting from wafer fabrication through assembly and testing using our specification 7700-4093.

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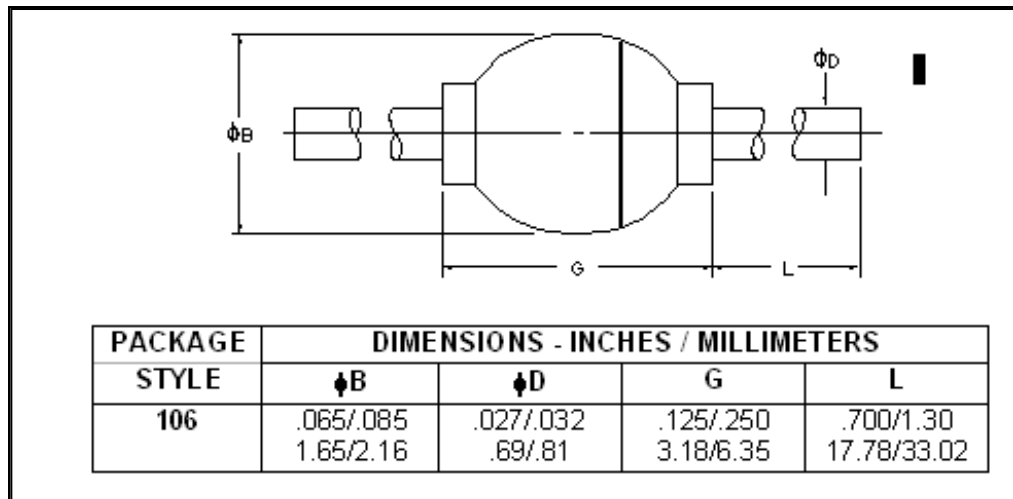
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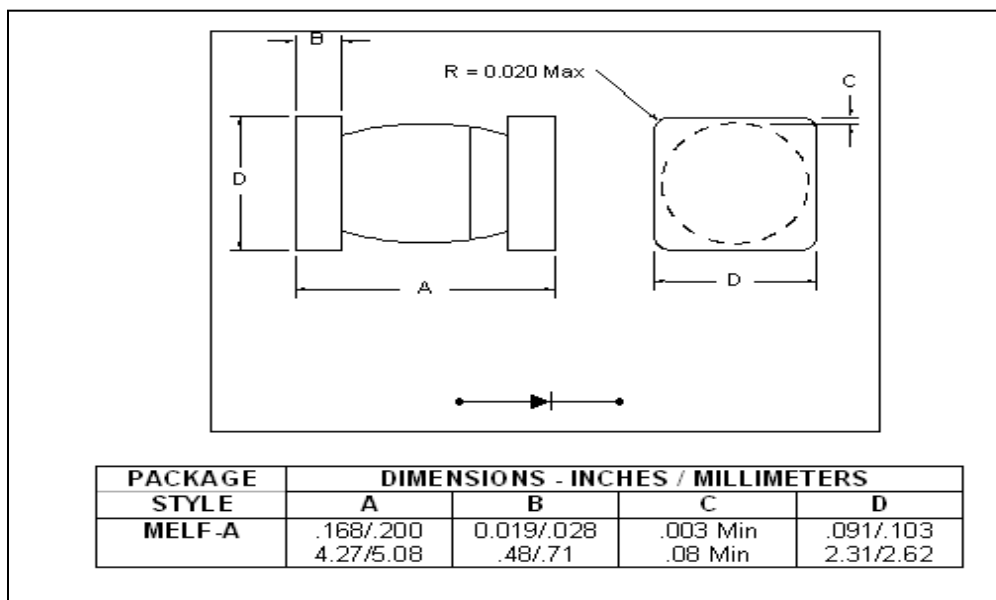
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DATA SHEET 5089, REV. A.3

MECHANICAL DIMENSIONS In Inches / (mm)

AXIAL



MELF (Add "U" or "US" to Part Number)



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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 1N6620)	*Part Number-- MELF Package (example for 1N6620)
1N	1N6620	1N6620US or 1N6620US
JAN	JAN1N6620	JAN1N6620US or JAN1N6620U
JANTX	JANTX1N6620	JANTX1N6620US or JANTX1N6620U
JANTXV	JANTXV1N6620	JANTXV1N6620US or JANTXV1N6620U
JANS	JANS1N6620	JANS1N6620US or JANS1N6620U

**Parts can also be ordered Tape & Reel*

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