

New Jersey Semi-Conductor Products, Inc.

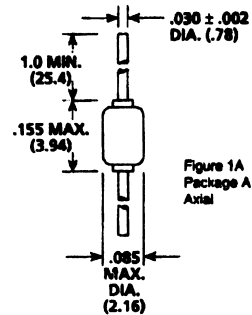
20 STERN AVE.
 SPRINGFIELD, NEW JERSEY 07081
 U.S.A.

TELEPHONE: (973) 376-2922
 (212) 227-6005
 FAX: (973) 376-8960

1N6620 thru 1N6625 ULTRA FAST RECTIFIERS

Features

- AXIAL AND SURFACE MOUNT CONFIGURATIONS
- HIGH VOLTAGE WITH ULTRA FAST RECOVERY TIME
- VERY LOW SWITCHING LOSS AT HIGH TEMPERATURE
- LOW CAPACITANCE
- METALLURGICALLY BONDED
- NON-CAVITY GLASS PACKAGE



Maximum Ratings @ 25°C

TYPE NUMBER	REVERSE VOLTAGE	OPERATING CURRENT (Note 1)	OPERATING CURRENT (Note 3)	PEAK FORWARD SURGE CURRENT (Note 2)	R _{θJC} L = .375"	R _{θJEC}
1N6620	200	2.0A	1.2A	20A	38°C/W	20°C/W
1N6621	400	2.0A	1.2A	20A	38°C/W	20°C/W
1N6622	600	2.0A	1.2A	20A	38°C/W	20°C/W
1N6623	800	1.5A	1.0A	20A	38°C/W	20°C/W
1N6624	900	1.5A	1.0A	20A	38°C/W	20°C/W
1N6625	1000	1.5A	1.0A	15A	38°C/W	20°C/W

Operating Temperature: -65°C to +175°C.

Storage Temperature: -65°C to +200°C.

Note 1: TL = +55°C, L = .375 inch for axial parts. Derate linearly at 0.80% / °C for TL > +55°C. For surface mount devices, US suffix, these currents apply with a maximum end cap temperature of 110°C. Derate linearly at 1.5% / °C above 110°C.

Note 2: Test pulse = 8.3ms, half sine wave.

Note 3: Independent of heatsinking.

Electrical Characteristics @ 25°C

TYPE NUMBER	REVERSE BREAK-DOWN VOLTAGE V _R I _R = 50µA	MAXIMUM FORWARD VOLTAGE V _F @ I _F		MAXIMUM D.C. REVERSE CURRENT @ RATED REVERSE VOLTAGE I _R		MAXIMUM REVERSE RECOVERY TIME t _{rr} Note 1	MAXIMUM JUNCTION CAPACITANCE C _J V _B = 10V	PEAK RECOVERY CURRENT I _{RM} (I _{FM} = 2A, I _R = 0.5A, 100µs)	FORWARD RECOVERY VOLTAGE V _{RRM} (I _{FM} = 2A, I _R = 0.5A, t _r = 12ns)
		V @ I _F	V @ I _F	µA @ 25°C	µA @ 175°C				
1N6620	220	1.40V @ 1.2A	1.60V @ 2.0A	0.5	150	30	10	3.5	12
1N6621	440	1.40V @ 1.2A	1.60V @ 2.0A	0.5	150	30	10	3.5	12
1N6622	660	1.40V @ 1.2A	1.60V @ 2.0A	0.5	150	30	10	3.5	12
1N6623	880	1.55V @ 1.0A	1.80V @ 1.5A	0.5	150	50	10	4.2	18
1N6624	990	1.55V @ 1.0A	1.80V @ 1.5A	0.5	150	50	10	4.2	18
1N6625	1100	1.75V @ 1.0A	1.95V @ 1.5A	1.0	200	60	10	5.0	30

NOTE 1: Reverse Recovery Time Test Conditions: I_F = 0.5A, I_{RM} = 1.0A, I_R(REC) = 0.25A.

Mechanical Characteristics

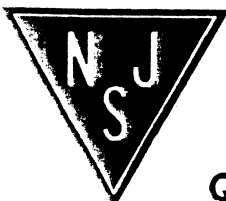
AXIAL LEADED DEVICES

CASE: Voidless Hermetically Sealed Hard Glass.

LEAD MATERIAL: Solder Dipped Copper.

MARKING: Body Painted, Alpha Numeric.

POLARITY: Cathode Band.



Quality Semi-Conductors