

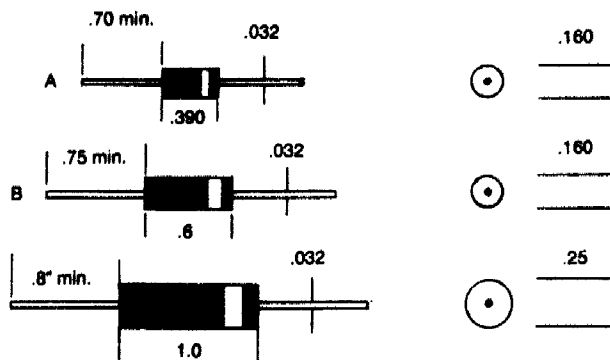
High Voltage, Fast Recovery Medium Current Rectifier H1601 Series

- Platinum Doped
- Uniform Chip-to-Chip Recovery
- High Voltage
- Medium Current
- Fast t_{rr}

MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)						
VARO Type No.	Package Style	Repetitive Peak Reverse Voltage V_{RRM}	Average Forward Current (Fig. 1) I_{FAV}	RMS Forward Current I_{FRMS}	Non-Repetitive Peak Surge Current $\frac{1}{2}$ Cycle @ 60 Hz I_{FSM}	Forward Voltage @ $I_F = 100\text{mA}$ V_F
H1601-1	A	1.0KV	400mA	625 mA	35A	4
H1601-1.5	A	1.5KV	400mA	625mA	35A	4
H1601-2	A	2.0KV	250mA	390mA	30A	7
H1601-3	A	3.0KV	250mA	390mA	30A	7
H1601-4	A	4.0KV	170mA	265mA	25A	10
H1601-5	A	5.0KV	170mA	265mA	25A	10
H1601-6	B	6.0KV	130mA	200mA	20A	18
H1601-8	B	8.0KV	130mA	200mA	20A	18
H1601-10	B	10.0KV	100mA	155mA	15A	20
H1601-12	B	12.0KV	100mA	155mA	15A	20
H1601-15	C	15.0KV	70mA	110mA	10A	30
H1601-18	C	18.0KV	70mA	110mA	10A	30

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)			
	SYMBOL		UNITS
Maximum DC Reverse Current at rated V_{RRM}	I_R	1	μA
Maximum DC Reverse Current at 80%P rated V_{RRM} 100%	I_R	10	μA
Maximum Reverse Recovery Time At $I_F = 50\text{mA}$, $I_R = 100\text{mA}$, and $I_{RR} = -25\text{mA}$ (Fig. 2)	t_r	250	nS
Ambient Operating Temperature Range	T_A	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

The rectifier as packaged can be tested in air (25°C , <55%RH) at rated V_{RRM} . However, in a dusty or humid environment, the rectifier should be overmolded or operated in oil or a gaseous dielectric to prevent corona or arcing.



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

