

New Jersey Semiconductor Products, Inc.

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

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

# 1N4001 thru 1N4008

General Purpose Plastic Rectifiers  
 Reverse Voltage 50 to 1200V Forward Current 1.0A

## Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	1N4008	Unit
device marking code		1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	1N4008	
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	1200	V
Maximum RSM voltage	$V_{RSM}$	35	70	140	280	420	560	700	840	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	1200	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at TA = 75°C	$I_{F(AV)}$	1.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30								A
Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead lengths at TA = 75°C	$I_{R(AV)}$	30								$\mu$ A
Typical thermal resistance (Note 1)	$R_{\theta JA}$	50								°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-50 to +150								°C

## Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	1N4008	Unit
Maximum instantaneous forward voltage at 1.0A	$V_F$	1.10								V
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TA = 100°C	$I_R$	5.0 50								$\mu$ A
Typical junction capacitance at 4.0V, 1MHz	$C_J$	15								PF

NOTES:

1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

