

1N4001 THRU 1N4007

1.0AMP. SILICON RECTIFIERS

FEATURE

- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed 260°C /10sec/ 0.375" lead length at 5 lbs tension

MECHANICAL DATA

. Terminal: Plated axial leads solderable per

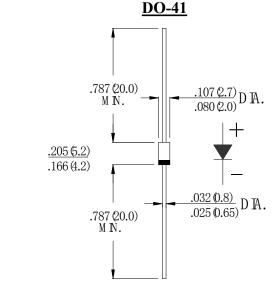
MIL-STD 202E, method 208C

. Case: Molded with UL-94 Class V-0 recognized

Flame Retardant Epoxy

. Polarity: color band denotes cathode

. Mounting position: any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	SYMBOL	1N	1N	1N	1N	1N	1N	1N	units
		4001	4002	4003	4004	4005	4006	4007	
Maximum Recurrent Peak Reverse Voltage	$V_{ m RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{ m RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	$V_{ m DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	7	1.0							A
.375"(9.5mm) lead length at $T_A = 55$ °C	I _{F(AV)}								
Peak Forward Surge Current 8.3ms single half									
sine-wave superimposed on rated load (JEDEC	<i>I</i> _{FSM} 30.0								A
method)									
Maximum Forward Voltage at 1.0A DC	$V_{ m F}$	1.0							V
Maximum Forward Voltage at 3.0A DC	V_{F}	1.3							V
Maximum DC Reverse Current @T _A =25°C	7	5.0 100.0							μΑ
at rated DC blocking voltage $@T_A = 100^{\circ}C$	$I_{ m R}$								
Typical Junction Capacitance (Note 1)	$C_{ m J}$	15							pF
Typical Thermal Resistance (Note 2)	$R_{(JA)}$	75							°C/W
Storage Temperature	$T_{ m STG}$	-55 to +150							°C
Operation Junction Temperature	$T_{ m J}$	-55 to +150							°C

Note:

- 1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- 2. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, vertical P.C. Board Mounted.