

1N4001 thru 1N4007

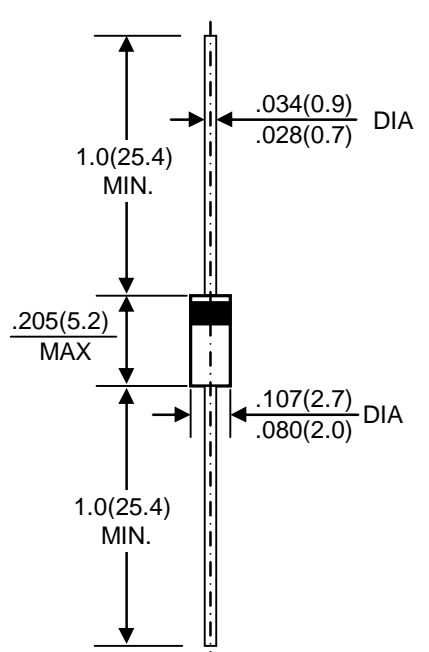
PLASTIC SILICON RECTIFIERS	REVERSE VOLTAGE - 50 to 1000 Volts FORWARD CURRENT - 1.0 Amperes								
<p>FEATURES</p> <ul style="list-style-type: none"> ● Low cost ● Diffused junction ● Low forward voltage drop ● Low reverse leakage current ● High current capability ● The plastic material carries UL recognition 94V-0 <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> ● Case: JEDEC DO-41 molded plastic ● Polarity: Color band denotes cathode ● Weight: 0.012 ounces , 0.34 grams ● Mounting position :Any 	<p>DO- 41</p>  <p>Dimensions in inches and (millimeters)</p>								
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS									
Rating at 25°C ambient temperature unless otherwise specified.									
Single phase, half wave ,60Hz, resistive or inductive load.									
For capacitive load, derate current by 20%									
CHARACTERISTICS	SYMBOL	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T _A =75 °C	I(AV)	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I _{FSM}	30							A
Maximum Forward Voltage at 1.0A DC	V _F	1.1							V
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C	I _R	5.0							uA
Typical Junction Capacitance (Note1)	C _J	15							pF
Typical Thermal Resistance (Note2)	R _{θJC}	26							°C/W
Operating Temperature Range	T _J	-55 to +125							°C
Storage Temperature Range	T _{STG}	-55 to +125							°C
NOTE:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC. 2.Thermal resistance junction of ambient									

FIG. 1 - FORWARD CURRENT DERATING CURVE

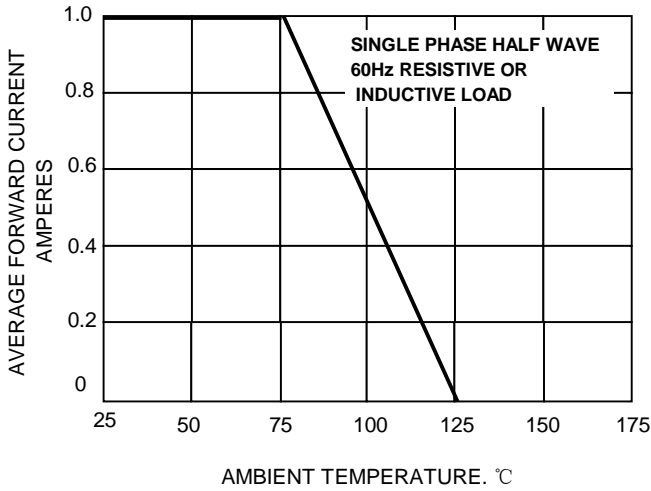


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

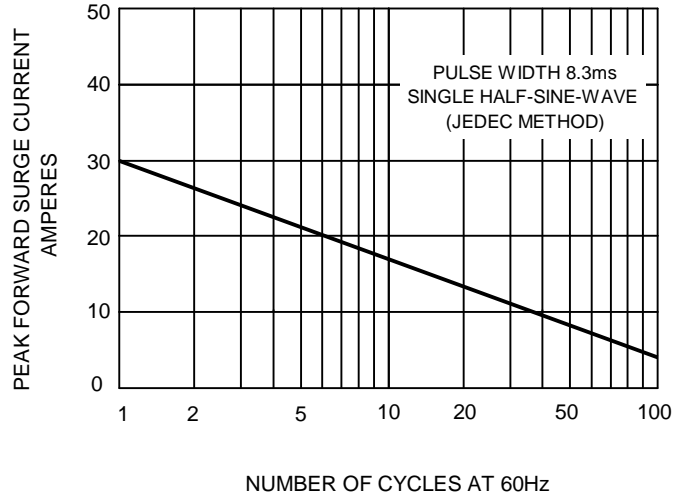


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

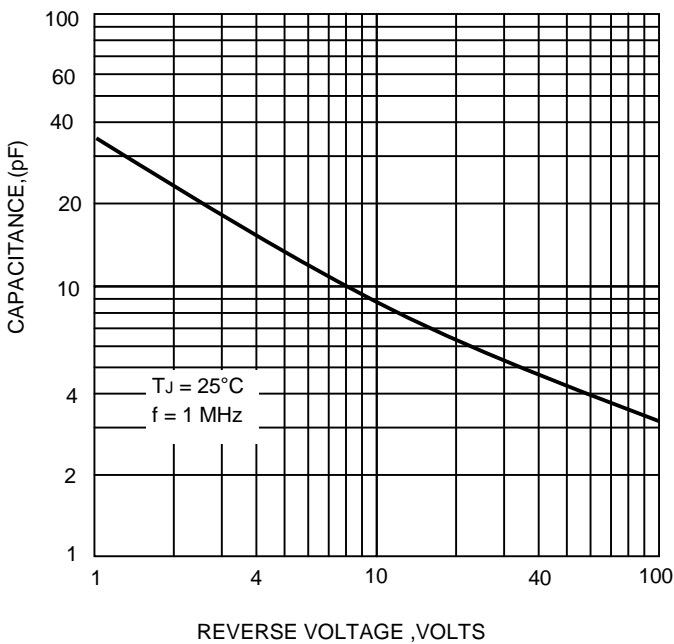


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

