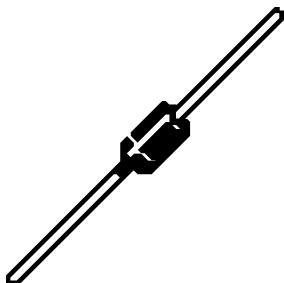


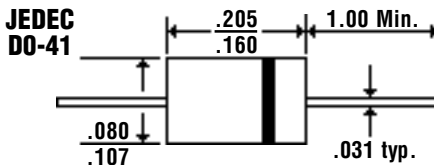
1.0 Amp MINIATURE PLASTIC SILICON RECTIFIERS

1N4001 . . . 4007 Series

Description



Mechanical Dimensions



Features

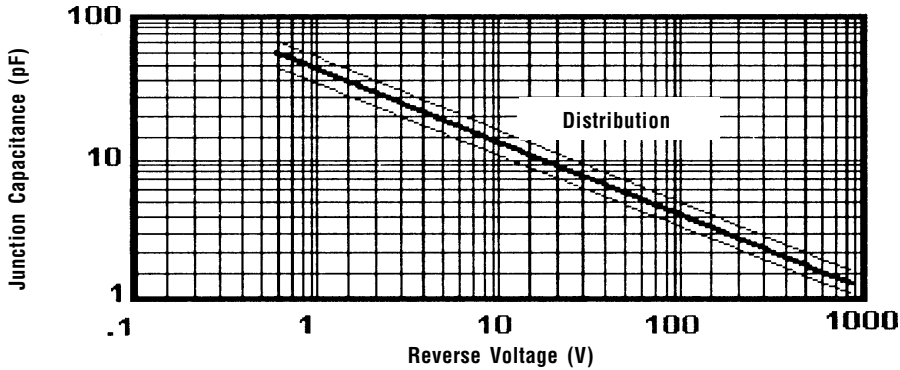
- LOW COST
- LOW LEAKAGE
- DIFFUSED JUNCTION
- MEETS UL SPECIFICATION 94V-0

1N4001 . . . 4007 Series								Units	
Maximum Ratings	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007		
Peak Repetitive Reverse Voltage... V_{RRM}	50	100	200	400	600	800	1000	Volts	
RMS Reverse Voltage... $V_{R(rms)}$	35	70	140	280	420	560	700	Volts	
DC Blocking Voltage... V_{DC}	50	100	200	400	600	800	1000	Volts	
Average Forward Rectified Current... $I_{F(av)}$ $T_A = 75^\circ\text{C}$ (Note 3)				1.0				Amps	
Non-Repetitive Peak Forward Surge Current... I_{FSM} @ Rated Current & Temp				50				Amps	
Working Peak Reverse Current... $I_{R(AV)}$ @ Full Cycle .375" Lead Length, $T_L = 75^\circ\text{C}$				30				μAmps	
Operating & Storage Temperature Range... T_J, T_{STRG}				-50 to 175				$^\circ\text{C}$	
Electrical Characteristics									
Maximum Forward Voltage @ 1.0A... V_F				1.1				Volts	
Maximum DC Reverse Current... I_R @ Rated DC Blocking Voltage	25 $^\circ\text{C}$				5.0				μAmps
	100 $^\circ\text{C}$				50				μAmps
Typical Junction Capacitance... C_J (Note 1)				30				pF	
Typical Thermal Resistance... $R_{\theta JA}$ (Note 2)				50				$^\circ\text{C} / \text{W}$	

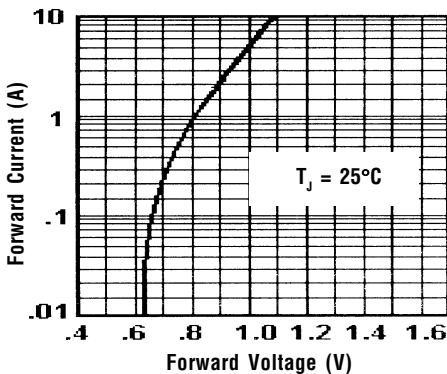
1.0 Amp MINIATURE PLASTIC SILICON RECTIFIERS

1N4001 . . . 4007 Series

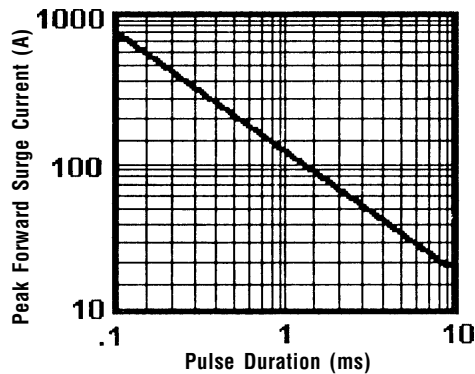
Typical Junction Capacitance



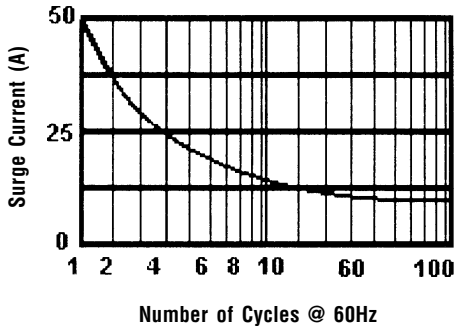
Typical Forward Characteristics



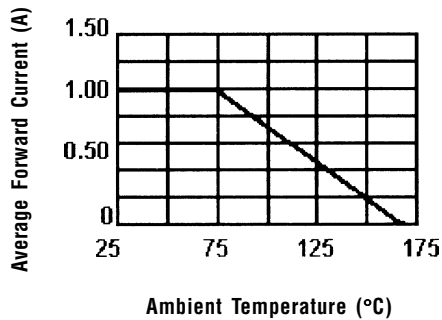
Peak Forward Surge Current



Maximum Non-Repetitive Surge Current



Forward Current Derating Curve



Ratings at 25 Deg. C ambient temperature unless otherwise specified.

Single Phase Half Wave, 60 Hz Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

- NOTES:**
1. Measured @ 1 MHz and applied reverse voltage of 4.0V.
 2. Thermal Resistance Junction to Ambient, Jedec Method.
 3. .375", (9.5mm) lead lengths.