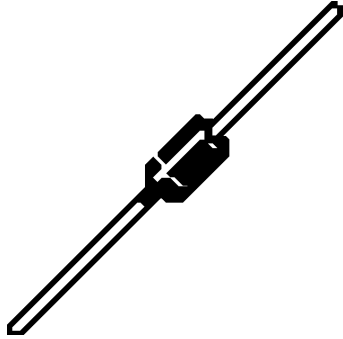


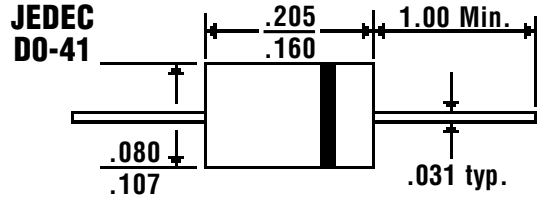
# 1.0 Amp MINIATURE PLASTIC SILICON RECTIFIERS

**1N4001 . . . 4007 Series**

## Description



## Mechanical Dimensions



## Features

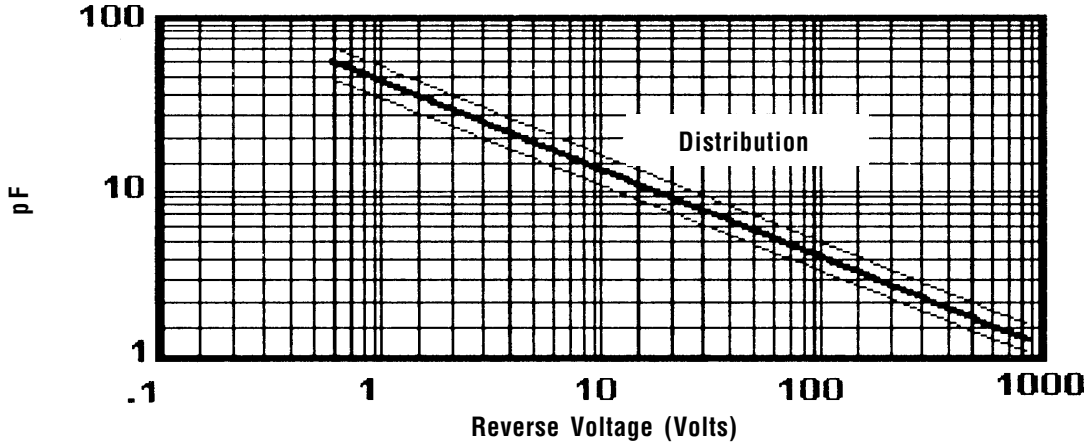
- LOW COST
- LOW LEAKAGE
- DIFFUSED JUNCTION
- MEETS UL SPECIFICATION 94V-0

Electrical Characteristics @ 25°C.	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
Forward Voltage @ 1.0A... $V_F$	.....			1.1	.....			Volts
Working Peak Reverse Current... $I_{PR}$ @ Full Cycle .375" Lead Length, $T_J = 75^\circ\text{C}$	.....			30	.....			$\mu\text{Amps}$
DC Reverse Current @ 25°C... $I_R$ @ Rated DC Blocking Voltage @ 75°C	.....			5.0	.....			$\mu\text{Amps}$
Typical Junction Capacitance... $C_J$ (Note 1)	.....			30	.....			pF
Typical Thermal Resistance... $R_{\theta JC}$ (Note 2)	.....			50	.....			$^\circ\text{C} / \text{W}$
Operating & Storage Temperature Range... $T_J, T_{STRG}$	.....			-50 to 175	.....			$^\circ\text{C}$

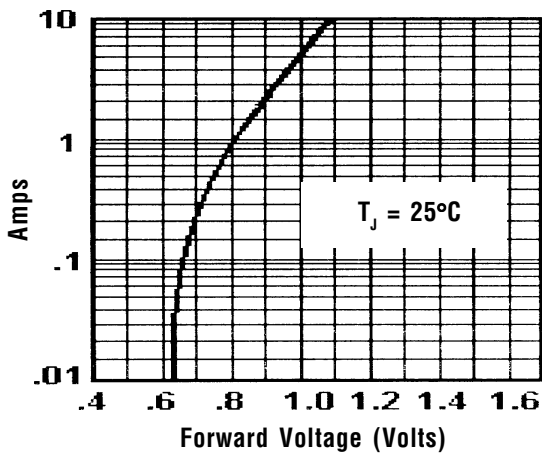
# 1.0 Amp MINIATURE PLASTIC SILICON RECTIFIERS

**1N4001 . . . 4007 Series**

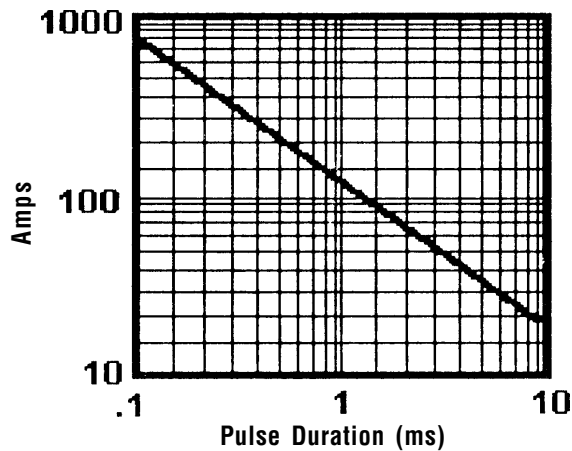
**Typical Junction Capacitance**



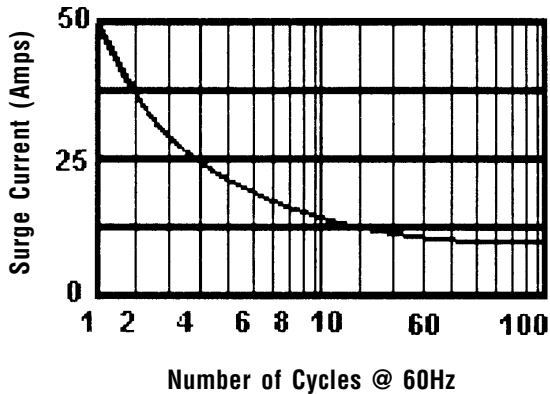
**Typical Forward Characteristics**



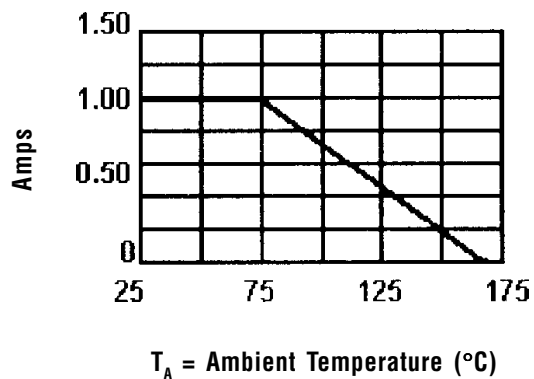
**Peak Forward Surge Current**



**Maximim 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. When Mounted to heat sink, from body.