

1N4001 THRU 1N4007



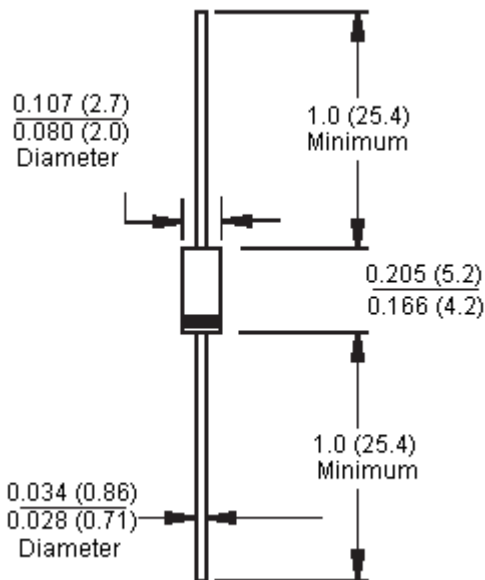
1.0 AMP. Silicon Rectifiers

Features:

- Low forward voltage drop.
- High current capability.
- High reliability.
- High surge current capability.

Voltage Range
50 to 1300 Volts
Current
1.0 Ampere

DO-41



Dimensions : Inches (Millimetres)

Mechanical Data:

Cases	: Moulded plastic.
Epoxy	: Rate flame retardant.
Lead	: Axial leads, solderable per MIL-STD-202, method 208 guaranteed.
Polarity	: Colour band denotes cathode end.
High temperature soldering guaranteed	: 260°C/10 second/0.375 inches, (9.5mm) lead lengths at 5lbs., (2.3kg) tension.

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1.0 AMP. Silicon Rectifiers

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%.

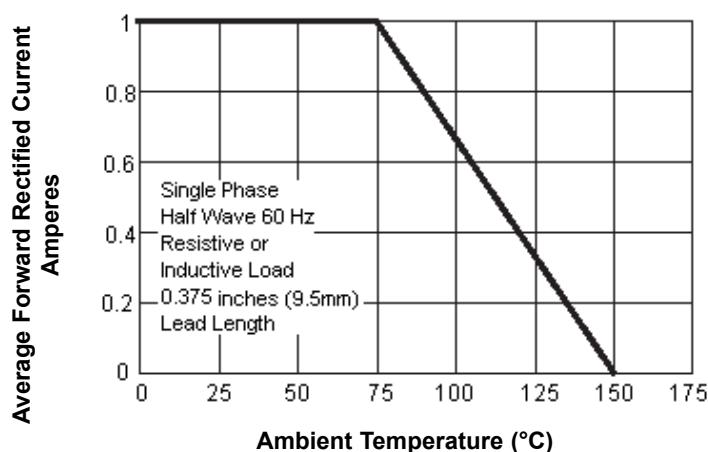
Type Number	Symbol	1N 4001	1N 4002	1N 4003	1N 4004	1N 4005	1N 4006	1N 4007	Units
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	
Maximum average forward rectified current 0.375 Inches (9.5mm) lead length at T _A = 75°C	I _(AV)	1.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30							
Maximum instantaneous forward voltage at 1.0A	V _F	1.0							V
Maximum DC reverse current at T _A = 25°C at rated DC blocking voltage at T _A = 100°C	I _R	5.0 50							μA
Maximum full load reverse current, full cycle average 0.375 inches (9.5mm) lead length at T _A = 75°C	HT _{IR}	30							μA
Typical junction capacitance (Note 1)	C _j	10							pF
Typical thermal resistance (Note 2)	Rθ _{JA}	65							°C/W
Operating and storage temperature range	T _J , T _{STG}	-65 to +150							°C

Note: 1. Measured at 1MHz and Applied Reverse Voltage of 4.0 Volts DC

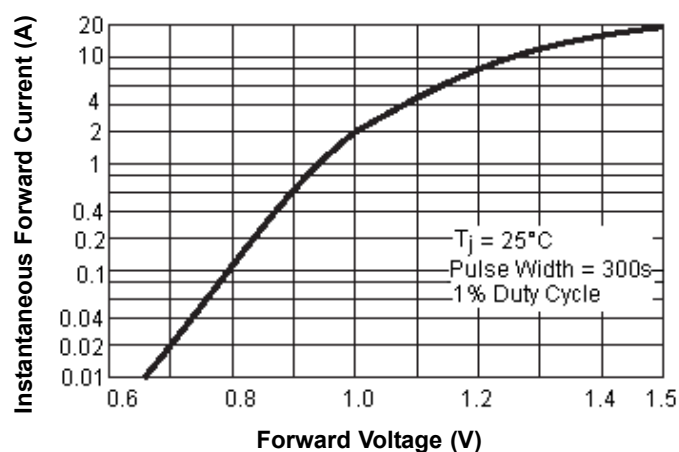
2. Mount on Cu-Pad Size 5 x 5mm on PCB.

Ratings and Characteristic Curves (1N4001)

Maximum Forward Current Derating Curve



Typical Forward Characteristics



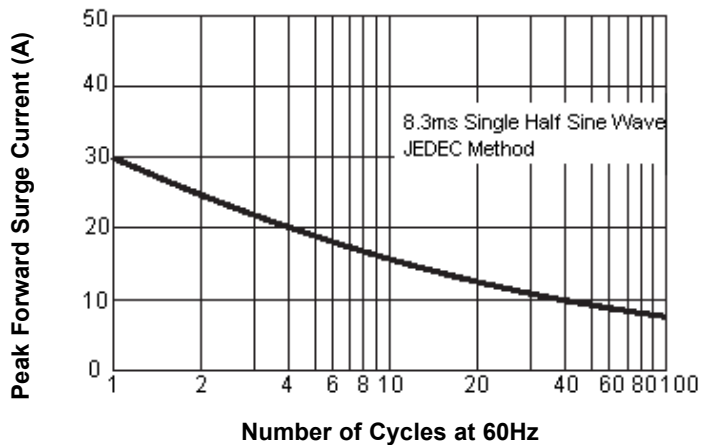
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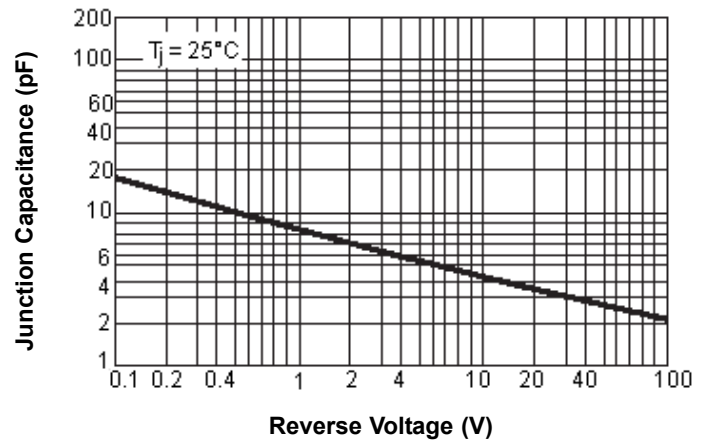


Ratings and Characteristic Curves (1N4001)

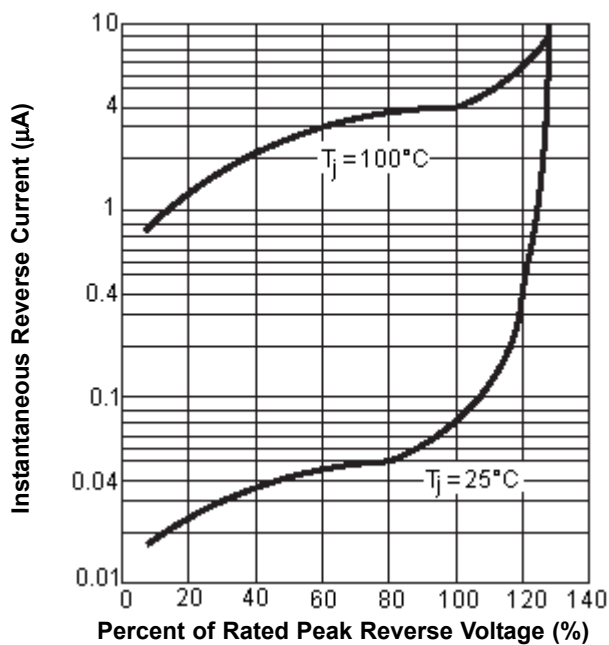
Maximum Non-Repetitive Forward Surge Current



Typical Junction Capacitance



Typical Reverse Characteristics



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