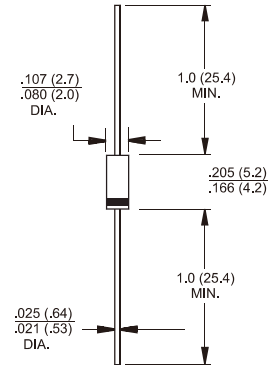


1N4001S - 1N4007S

1.0 AMP. Silicon Rectifiers

A-405



Features

- High efficiency, Low VF
- High current capability
- High reliability
- High surge current capability
- Low power loss
- ψ0.6mm leads
- Green compound with suffix "G" on packing code & prefix "G" on datecode.

Mechanical Data

- Cases: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free., solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode
- High temperature soldering guaranteed: 260°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- Weight: 0.22 grams

Dimensions in inches and (millimeters)

Marking Diagram



1N400XS = Specific Device Code
G = Green Compound
Y = Year
WW = Work Week

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

Type Number	Symbol	1N4001S	1N4002S	1N4003S	1N4004S	1N4005S	1N4006S	1N4007S	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	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length @T _A = 75 °C	I _{F(AV)}	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	30							A
Maximum Instantaneous Forward Voltage @1.0A	V _F	1.0							V
Maximum DC Reverse Current at @ T _A =25 °C	I _R	5.0							uA
Rated DC Blocking Voltage (Note 1) @ T _A =125 °C		50							uA
Maximum Full Load Reverse Current, Full Cycle Average .375"(9.5mm) Lead Length @T _A =75 °C	I _{R(AV)}	30							uA
Typical Junction Capacitance (Note 3)	C _j	15							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	50							°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150							°C

- Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle
2. Mount on Cu-Pad Size 5mm x 5mm on P.C.B.
3. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

RATINGS AND CHARACTERISTIC CURVES (1N4001S THRU 1N4007S)

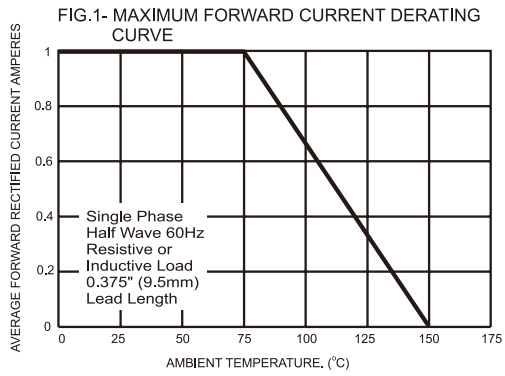


FIG.2- TYPICAL REVERSE CHARACTERISTICS

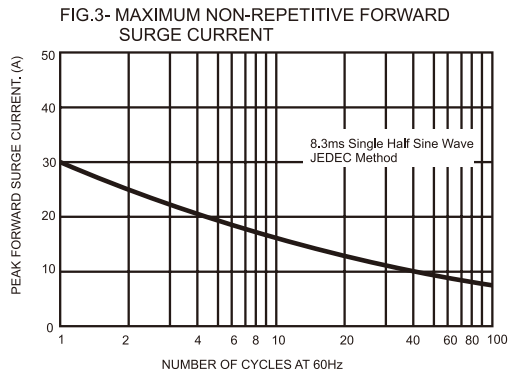
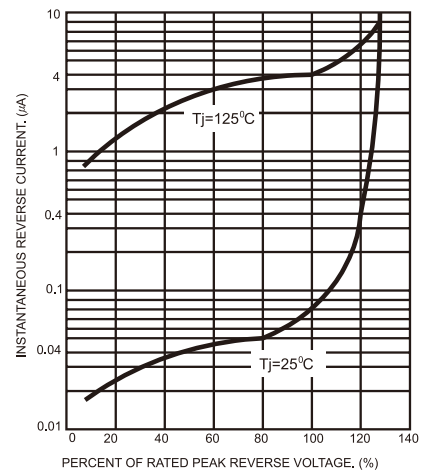


FIG.4- TYPICAL JUNCTION CAPACITANCE

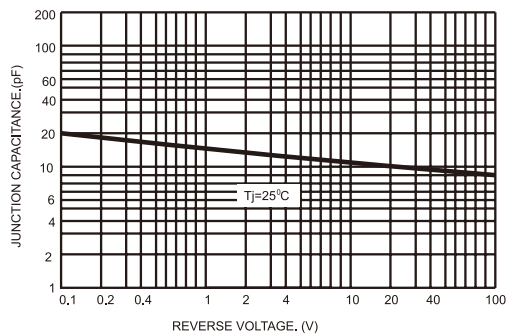
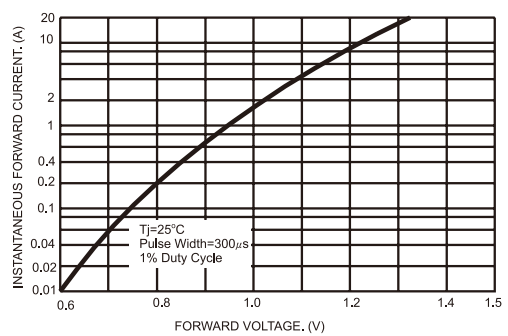


FIG.5- TYPICAL FORWARD CHARACTERISTICS



Mouser Electronics

Authorized Distributor

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