



1N4001 THRU 1N4007

1.0 AMP. SILICON RECTIFIERS

Voltage Range
50 to 1000 Volts
Current
1.0 Amperes

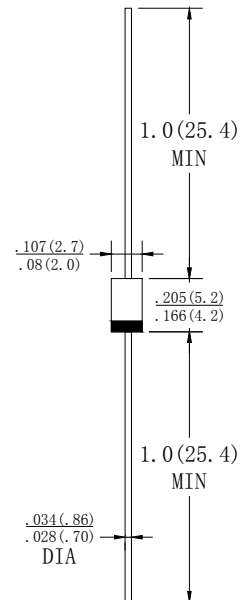
D0-41

Features

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

Mechanical Data

- Cases: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed; 250°C /10 seconds/.375", (9.5mm) lead Lengths at 5 lbs., (2.3kg) tension
- Weight: 0.35 gram



Dimensions in inches and (millimeters)

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		1N 4001	1N 4002	1N 4003	1N 4004	1N 4005	1N 4006	1N 4007	UNITS
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375" (9.5mm) Lead length @ TA=75°C	IF(AV)	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30							A
Maximum Instantaneous Forward Voltage @1.0A	VF	1.0							V
Maximum DC Reverse Current @ TA=25°C at rated DC blocking voltage @ TA=100°C	IR	5.0 50.0							μ A μ A
Typical Thermal Resistance (Note)	R θ JA	50							°C /W
Operating Temperature Range	TJ	-65 to +125							°C
Storage Temperature Range	TSTG	-65 to +150							°C

NOTE: Thermal resistance from junction to ambient 0.375" (9.5mm) lead length.

RATING AND CHARACTERISTIC CURVES 1N4001 THRU 1N4007



FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMMENT

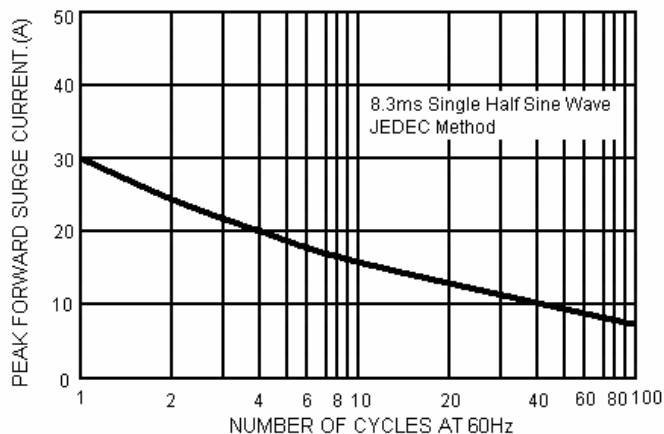


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

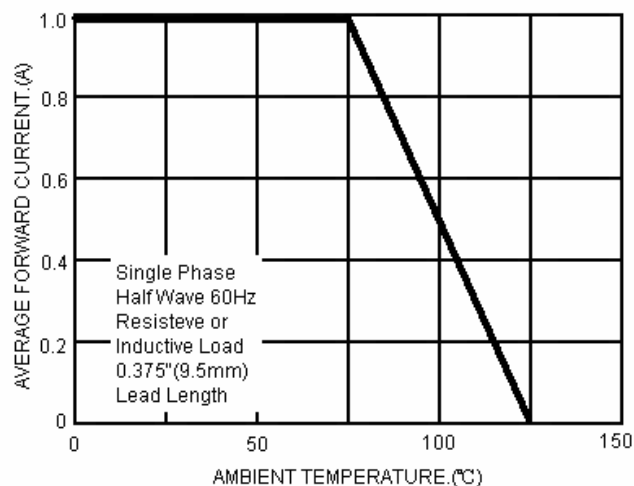


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

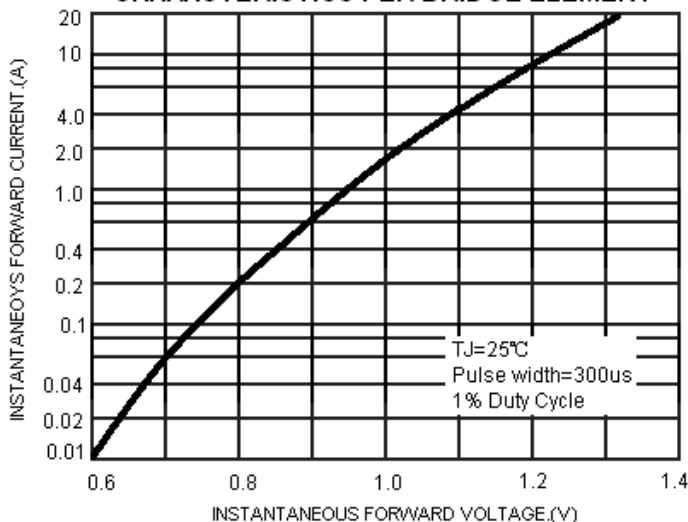


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

