

PLASTIC SILICON RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V CURRENT: 1.0 A

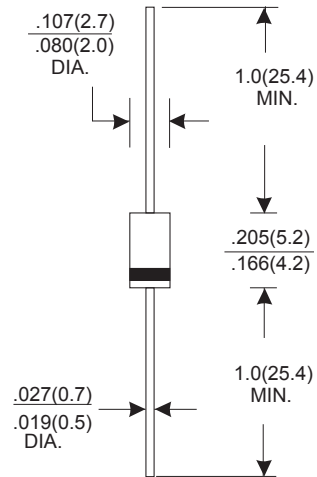
FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epoxy:UL 94V-0 rate flame retardant

MECHANICAL DATA

- Case style: DO-41 plastic molded
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any

DO-41



Dimensions in inches and(millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

TYPE NUMBER	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum average forward rectified Current 9.5mm lead length, @T _A =75°C	1.0							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30							A
Maximum Instantaneous Forward Voltage at 1.0A	1.0							V
Maximum DC Reverse Current	5.0							μA
at Rated DC Blocking Voltage	50							μA
Typical Junction Capacitance(Note 1)	15							Pf
Typical Thermal Resistance R _{θJA} (Note 2)	50							°C/W
Operating and Storage Temperature Range T _J , T _{stg}	-65--+125							°C

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance from Junction to Ambient. 375"(9.5mm) lead length.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

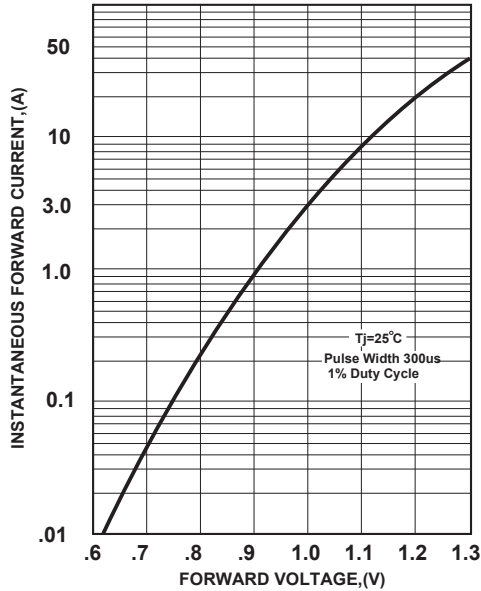


FIG.2 -- PULSE DERATING CURVE

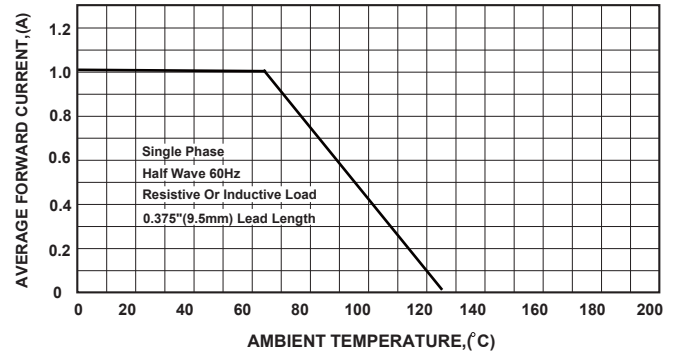


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

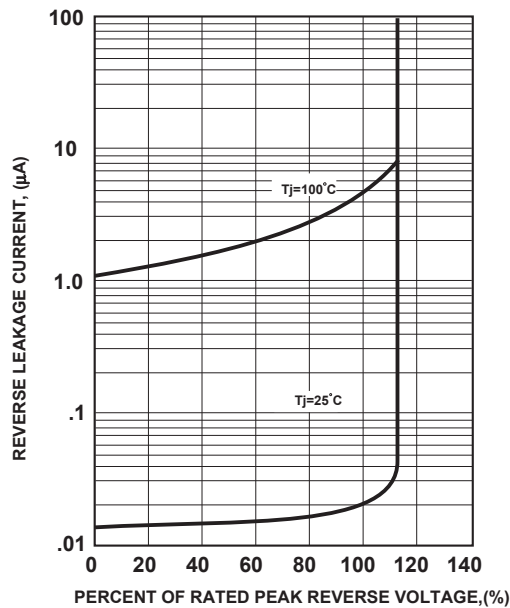


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

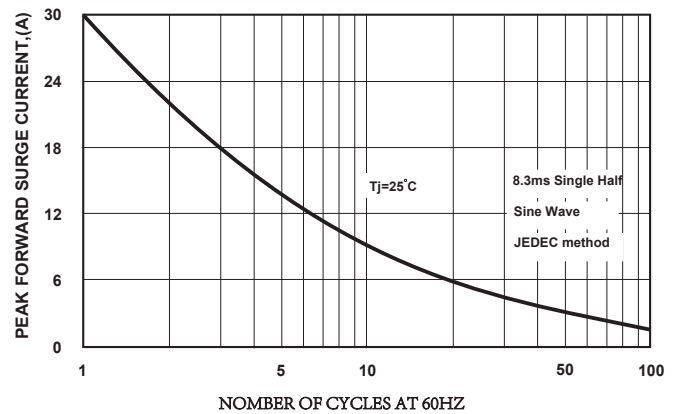


FIG.5-TYPICAL JUNCTION CAPACITANCE

