

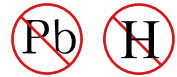


YEA SHIN TECHNOLOGY CO., LTD

1N4001 THRU 1N4007

## PLASTIC SILICON RECTIFIERS

VOLTAGE - 50 to 1000 Volts CURRENT - 1.0 Ampere



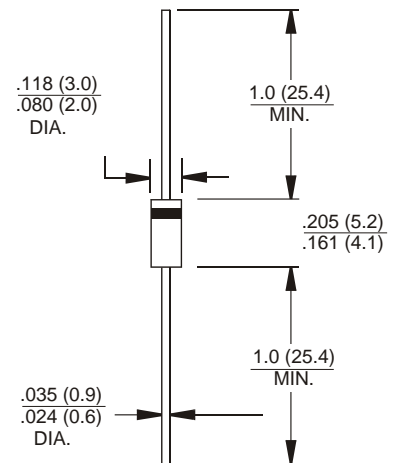
### FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Exceeds environmental standards of MIL-S-19500/228
- High temperature soldering : 260 °C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

### MECHANICAL DATA

- Case: DO-41 Molded plastic
- Epoxy: UL 94V-0 rate flame retardant.
- Lead: Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any

DO-41 Unit:inch (mm)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.

Item	SYMBOLS	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	UNIT
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
Average Forward Current ,Io @ TA =75°C 3/8" lead length, 60 HZ resistive or inductive load.	I(AV)	1.0							A
Peak Forward Surge Current ,IFM (surge):8. 3ms single half sine-wave superimposed on rated load(JEDEC method)	IFSM	30							A
Maximum Forward Voltage at 1.0A DC and 25°C	VF	1.1							V
Maximum Full Load Reverse Current ,Full Cycle Average at TA=75°C	IR	30.0							μA
Maximum DC Reverse Current at TA=25°C	IR	5.0							μA
At Rated DC Blocking Voltage TA=100°C		50							μA
Typical Junction capacitance@ (Note 1)	CJ	15							pF
Typical Thermal Resistance (Note 2)	RθJA	50.0							°C/W
Typical Thermal Resistance (Note 2)	RθJL	25.0							°C/W
Operating and Storage Temperature Range	TJ,TSTG	-50 to +150							°C

### NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Thermal Resistance from Junction to Ambient and from junction to lead at 0.375"(9.5mm)lead length P.C.B.mounted.

# DEVICE CHARACTERISTICS

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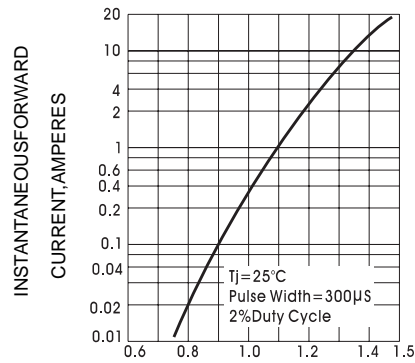


Fig.1-TYPICAL FORWARD CHARACTERISTICS

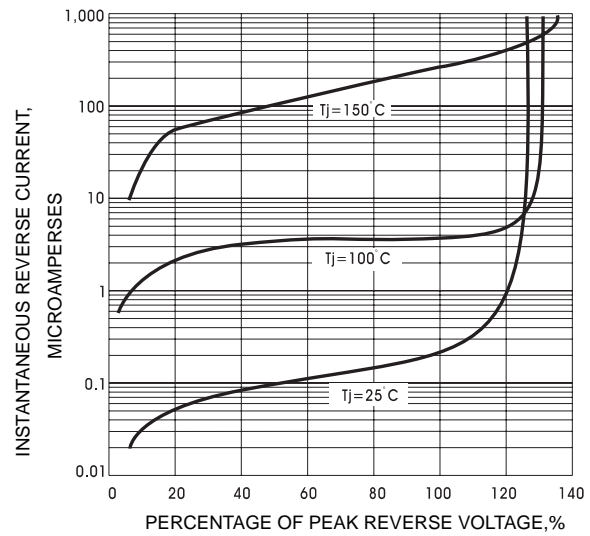


Fig.2-TYPICAL REVERSE CHARACTERISTICS

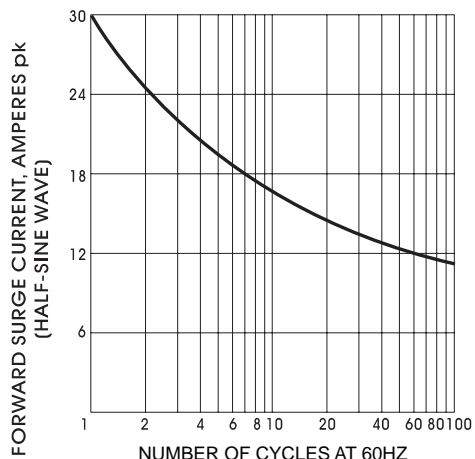


Fig.3-MAXIMUM OVERLOAD SURGE-CURRENT

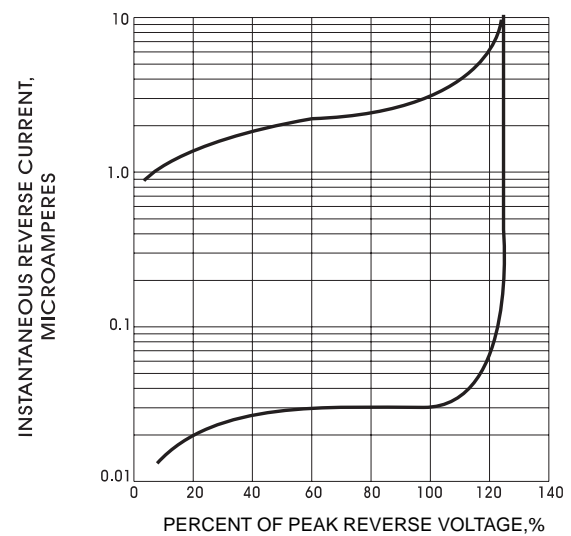


Fig.4-TYPICAL REVERSE CHARACTERISTICS

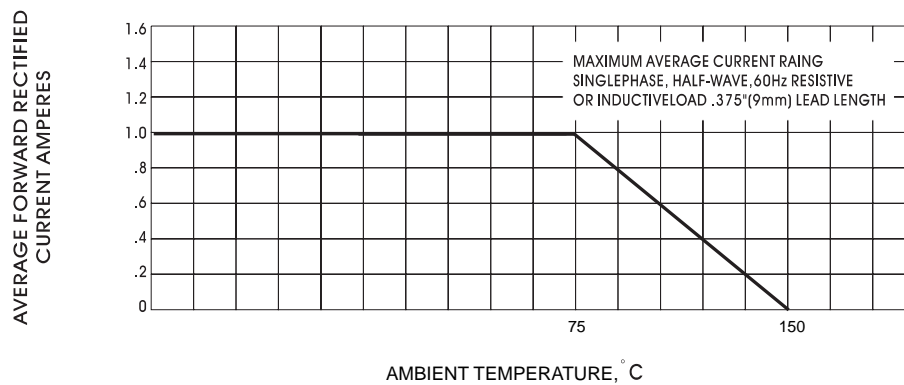


Fig.5-FORWARD DERATING CURVE