

FEATURES:

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

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

MECHANICAL DATA

Case : Molded plastic

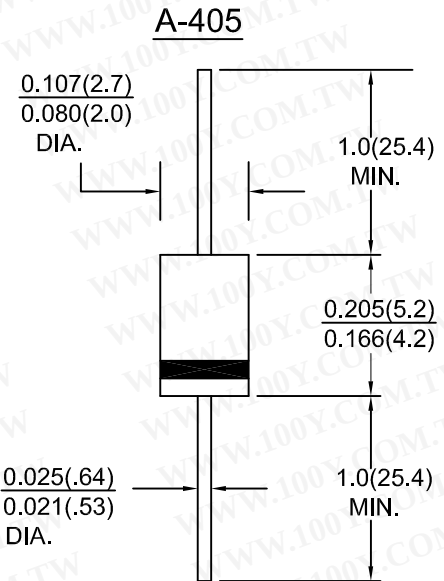
Epoxy : UL 94V-0 rate flame retardant

Lead : Axial leads, solderable per MIL-STD-202,
method 208 guaranteed

Polarity : Color band denotes cathode end

Mounting Position : Any

Weight : 0.22 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.

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

For capacitive load, derate current by 20 %.

Characteristic	Symbol	1N 4001S	1N 4002S	1N 4003S	1N 4004S	1N 4005S	1N 4006S	1N 4007S	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current .375"(9.5mm) lead length at $T_a=75^\circ\text{C}$	I_O	1.0							Amps
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	30.0							Amps
Maximum instantaneous forward voltage at 1.0 A	V_F	1.0							Volts
Maximum DC reverse current $T_a=25^\circ\text{C}$ at rated DC blocking voltage $T_a=100^\circ\text{C}$	I_R	5.0 50.0							μA
Typical junction capacitance (note 1)	C_J	15							pF
Typical thermal resistance (note 2)	R_{th-JA}	50							$^\circ\text{C/W}$
Operating junction and storage temperature range	T_j, T_{stg}	-65 to +125			-65 to +150				$^\circ\text{C}$

NOTES:1. Measured at 1MHz and Applied reverse voltage of 4.0V_{DC}

2. Thermal Resistance from junction to ambient .375"(9.5mm) lead length.

RATINGS AND CHARACTERISTIC CURVES 1N4001S THRU 1N4007S

FIG.1-TYPICAL FORWARD CHARACTERISTICS

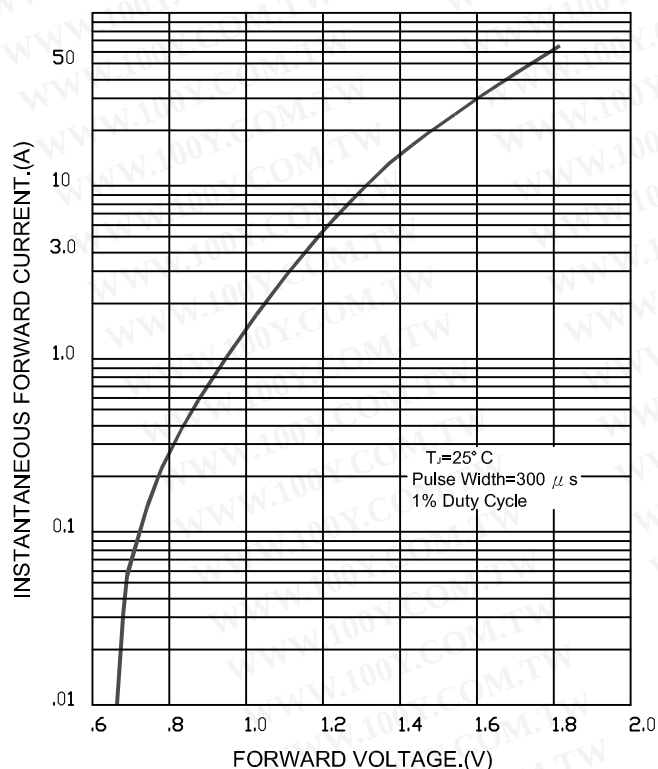


FIG.2 - TYPICAL FORWARD CURRENT DERATING CURVE

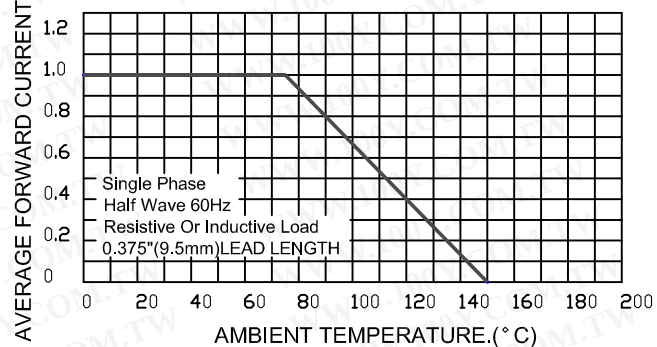


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

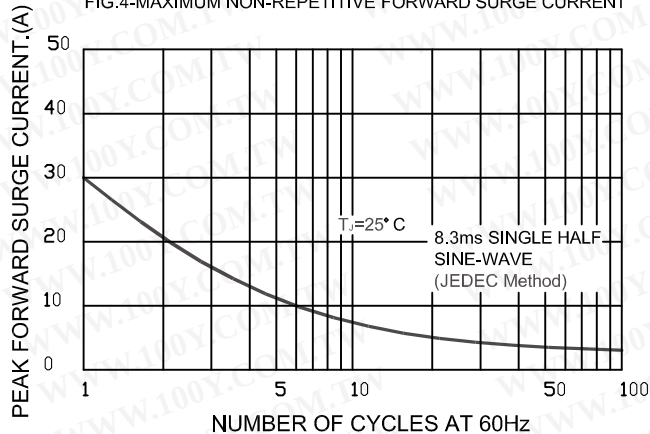


FIG.3-TYPICAL FORWARD CHARACTERISTICS

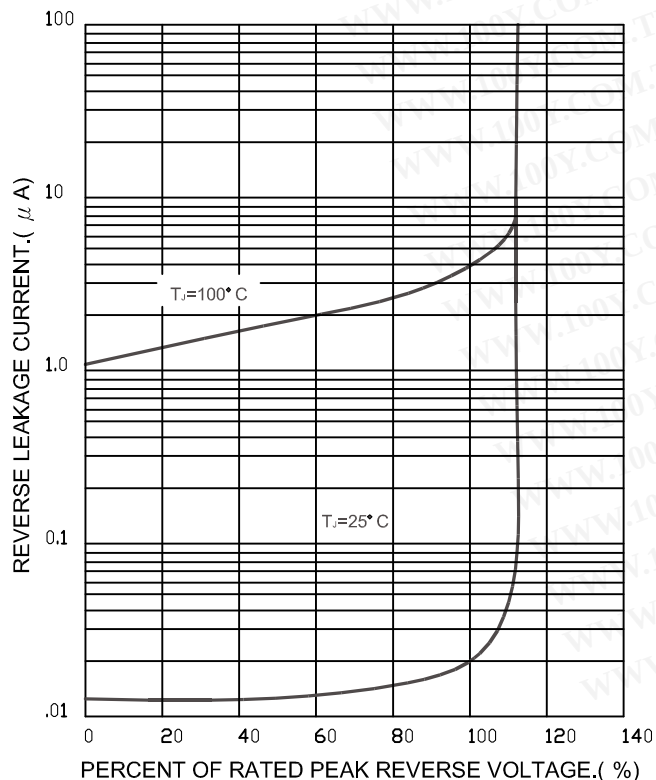
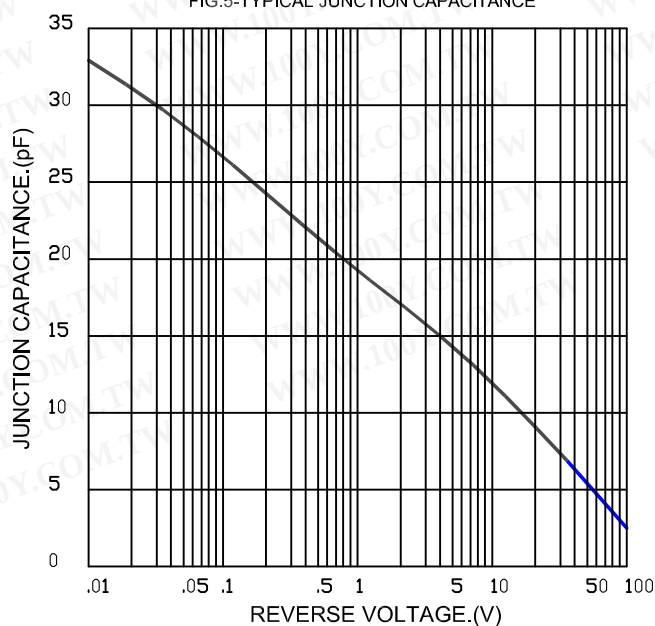


FIG.5-TYPICAL JUNCTION CAPACITANCE



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