

FEATURES:

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

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

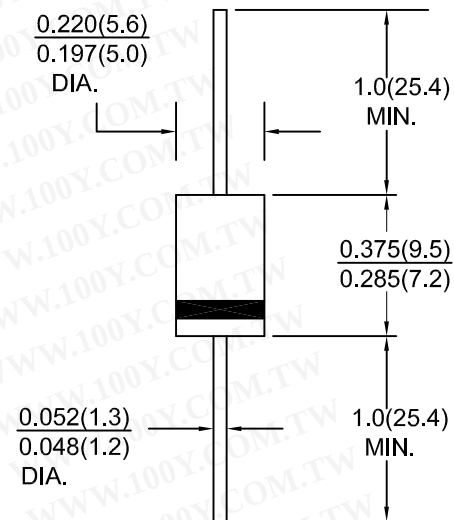
Lead : Axial leads, solderable per MIL-STD-202,
 Method 208 guaranteed

Polarity : Color band on body denotes cathode end

Mounting Position : Any

Weight : 1.10 grams

DO-201AD



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	HER 501	HER 502	HER 503	HER 504	HER 505	HER 506	HER 507	HER 508	Units
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	300	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	210	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	300	400	600	800	1000	Volts
Maximum average forward rectified current .375"(9.5mm) lead length at Ta=50 °C	I _O	5.0								Amps
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I _{FSM}	200								Amps
Maximum instantaneous forward voltage at 5.0 A	V _F	1.0			1.30		1.7			Volts
Maximum DC reverse current Ta=25 °C at rated DC blocking voltage Ta=100 °C	I _R	10.0 200								μ A
Maximum reverse recovery time (note 1)	t _{rr}	50					75			nS
Typical junction capacitance (note 2)	C _j	75								pF
Operating and storage temperature range	T _j ,T _{stg}	-65 to +150								°C

Notes : 1. Reverse recovery test condition : I_F=0.5A ; I_R=1.0A ; I_{RR}=0.25A

2. Measured 1MHz and applied reverse voltage of 4.0V DC

RATINGS AND CHARACTERISTIC CURVES HER501 THRU HER508

FIG.1-TYPICAL FORWARD CHARACTERISTICS

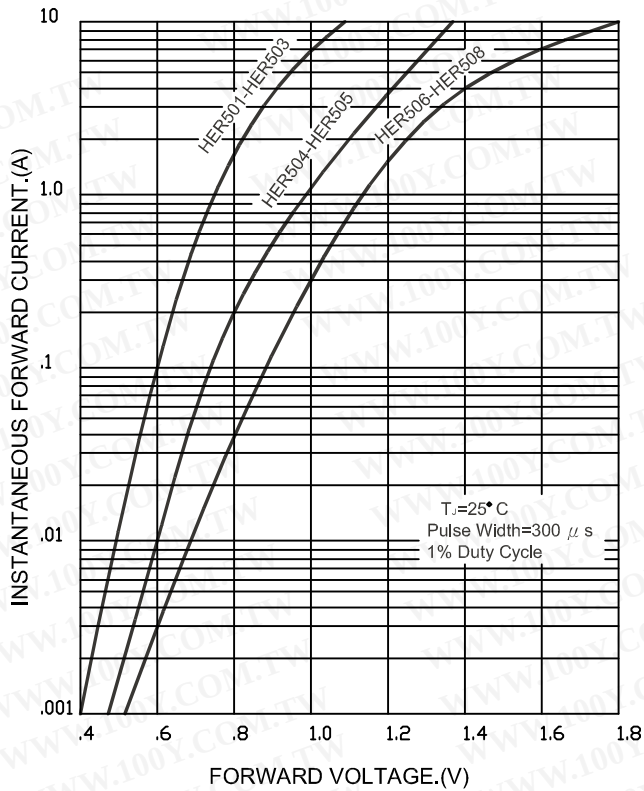
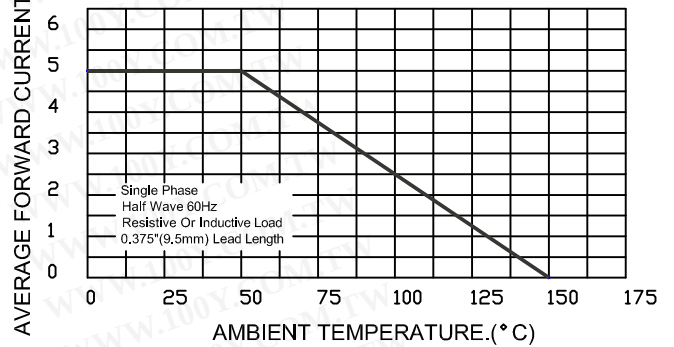


FIG.2 - TYPICAL FORWARD CURRENT DERATING CURVE



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)

FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

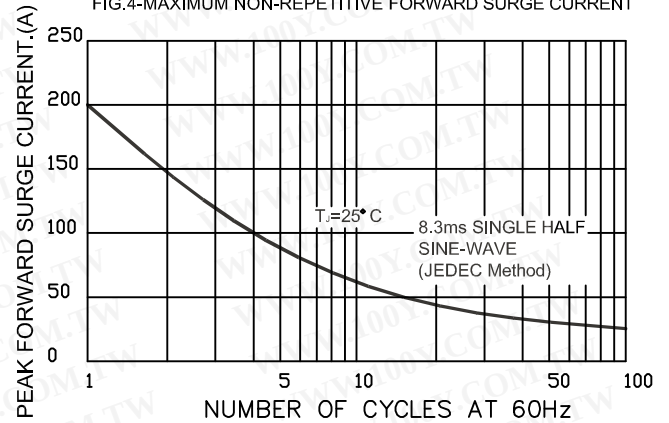
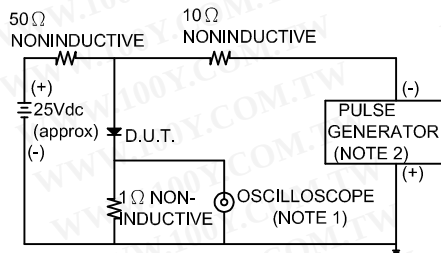


FIG.3-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time = 7ns max. Input Impedance = 1 megohm, 22pF
2. Rise Time = 10ns max. Source Impedance = 50 ohms

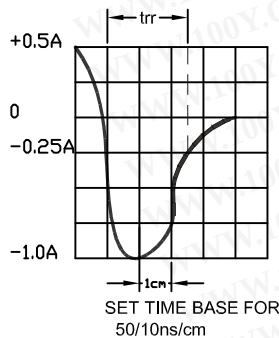


FIG.5-TYPICAL JUNCTION CAPACITANCE

