



**DC COMPONENTS CO., LTD.**

RECTIFIER SPECIALISTS

**HER801  
THRU  
HER805**

**TECHNICAL SPECIFICATIONS OF HIGH EFFICIENCY RECTIFIER**  
**VOLTAGE RANGE - 50 to 400 Volts**      **CURRENT - 8.0 Amperes**

**FEATURES**

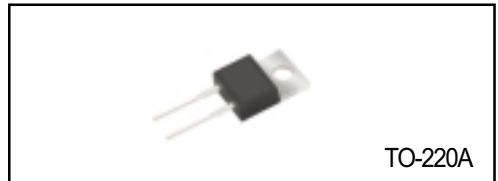
- \* Low switching noise
- \* Low forward voltage drop
- \* Low thermal resistance
- \* High current capability
- \* High fast switching capability
- \* High surge capability

**MECHANICAL DATA**

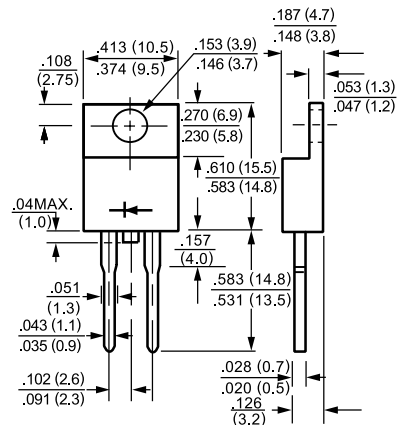
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: As marked
- \* Mounting position: Any
- \* Weight: 2.24 grams

**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%.



TO-220A



Dimensions in inches and (millimeters)

	SYMBOL	HER801	HER802	HER803	HER804	HER805	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	Volts
Maximum RMS Voltage	VRMS	35	70	140	210	280	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	300	Volts
Maximum Average Forward Rectified Current at Tc = 75°C	IO	8.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	300					Amps
Maximum Instantaneous Forward Voltage at 8.0A DC	VF	1.1					Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@Tc = 25°C	10					uAmps
	@Tc = 100°C	150					
Maximum Reverse Recovery Time (Note 1)	trr	60					nSec
Typical Thermal Resistance	RθJC	2.5					°C/W
Typical Junction Capacitance (Note 2)	CJ	40					pF
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 150					°C

NOTES : 1. Test Conditions: IF = 0.5A, IR = 1.0A, IRR = 0.25A  
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
 3. Suffix "R" for Reverse Polarity.

# RATING AND CHARACTERISTIC CURVES (HER801 THRU HER805)

FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

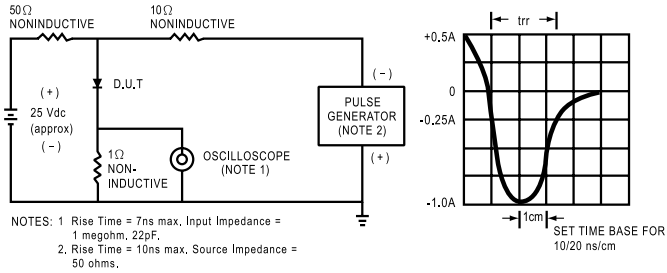


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

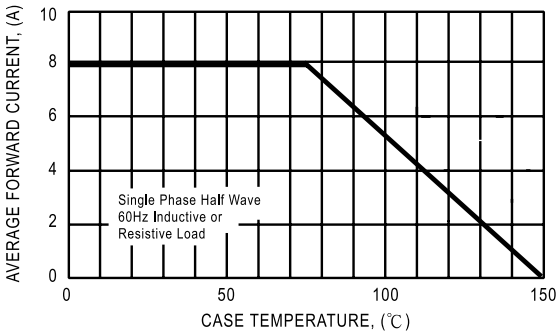


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

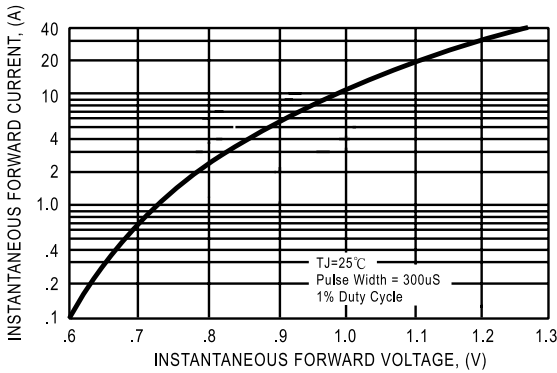


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

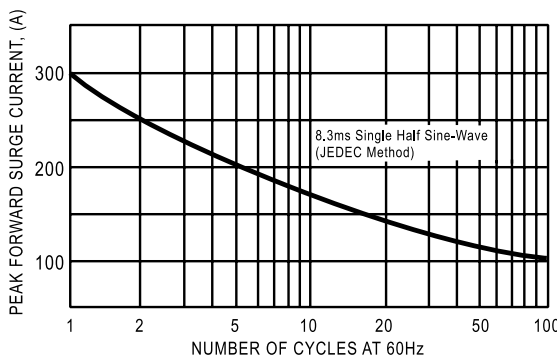


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

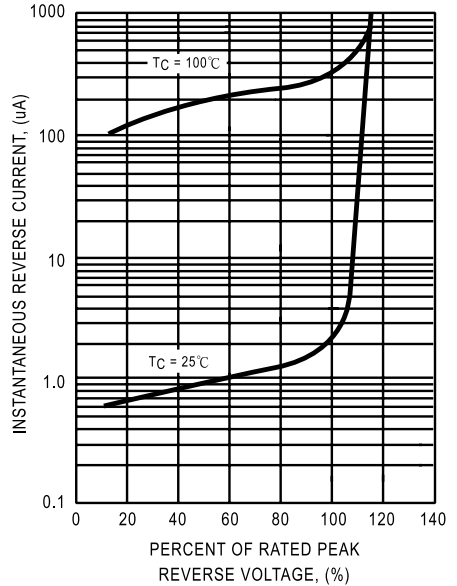


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

