



**DC COMPONENTS CO., LTD.**

RECTIFIER SPECIALISTS

**HER801F  
THRU  
HER806F**

**TECHNICAL SPECIFICATIONS OF HIGH EFFICIENCY RECTIFIER**

**VOLTAGE RANGE - 50 to 600 Volts**

**CURRENT - 8.0 Amperes**

**FEATURES**

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

**MECHANICAL DATA**

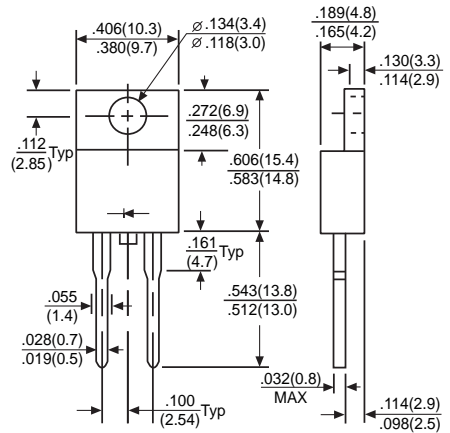
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- \* Mounting position: Any
- \* Weight: 2.24 grams

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating 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%.



ITO-220A



Dimensions in inches and (millimeters)

	SYMBOL	HER801F	HER802F	HER803F	HER804F	HER805F	HER806F	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	600	Volts
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	600	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	150						Amps
Maximum Instantaneous Forward Voltage at 8.0A DC	VF	1.0		1.3		1.7		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ Tc = 25°C	10						µAmps
	@ Tc = 100°C	500						µAmps
Maximum Reverse Recovery Time (Note 1)	trr	50		75		100		nSec
Typical Junction Capacitance (Note 2)	CJ	120		70				pF
Operating and Storage Temperature Range	TJ, TSTG	-55 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 (HER801F THRU HER806F)

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

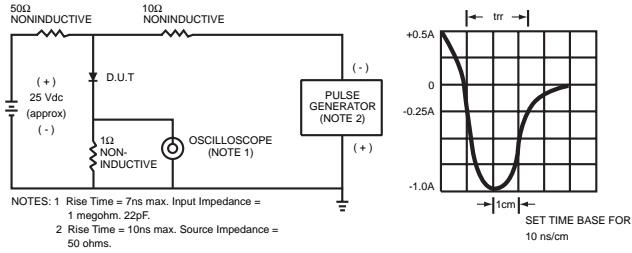


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

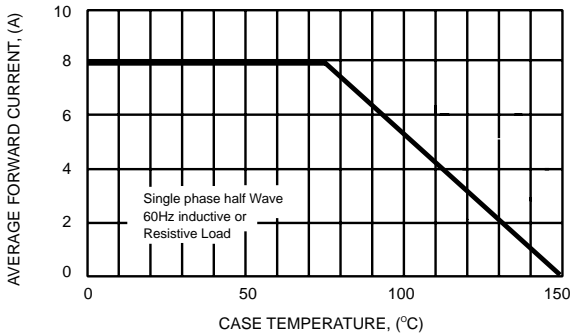


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

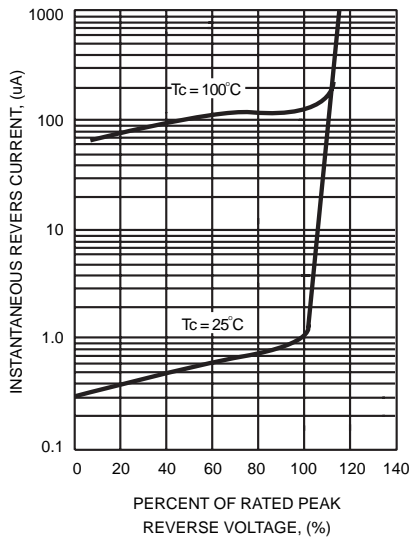


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

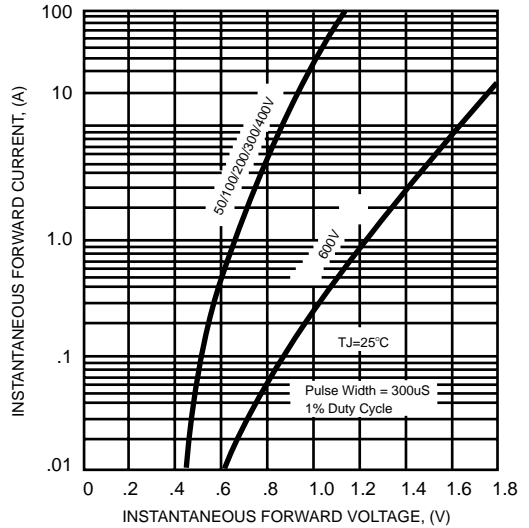


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

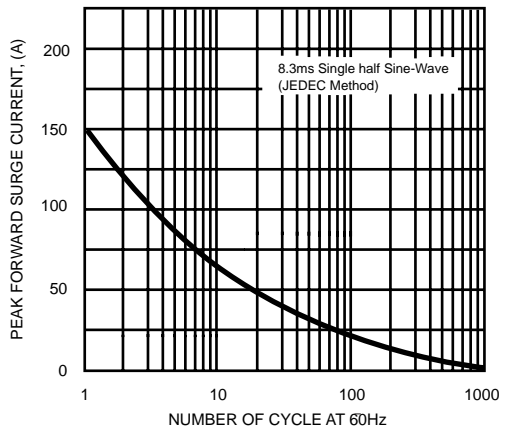
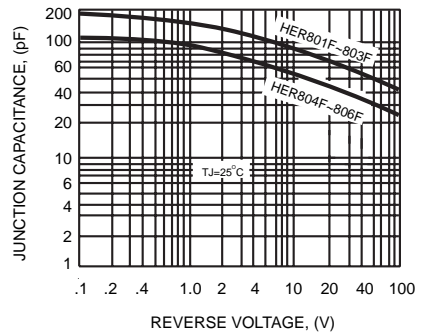


FIG. 6 - TYPICAL JUNCTION CAPACITANCE



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