

HER801 THRU HER805

HIGH EFFICIENCY RECTIFIER

VOLTAGE RANGE 50 to 400 Volts CURRENT 8.0 Amperes

FEATURES

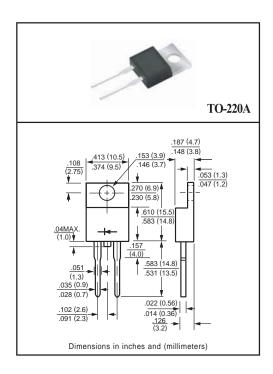
- * Low switching noise
- * Low forward voltage drop
- * Low thermal resistance
- * High current capability
- * High fast switching capability
- * High surge capability

MECHANICAL DATA

- * Case: TO-220A molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any * Weight: 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at $25\,^{\circ}\text{C}$ ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	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	300	400	Volts
Maximum Average Forward Rectified Current at Tc = 75°C	lo	8.0				Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	200				Amps	
Typical Current Square Time	l ² t	167			A ² S		
Typical Thermal Resistance	RθJC	2.5				°C/W	
Typical Junction Capacitance (Note 2)	Cı	40				pF	
Operating and Storage Temperature Range	TJ, TSTG	-55 to + 150				°C	

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	HER801	HER802	HER803	HER804	HER805	UNITS
Maximum Instantaneous Forward Voltage at 8.0A DC		VF	1.0		1.3		Volts	
Maximum DC Reverse Current	@Tc = 25°C	1-	10				uAmps	
at Rated DC Blocking Voltage	@Tc = 100°C	lR IR	150					
Maximum Reverse Recovery Time (Note 1)		trr	50			nSec		

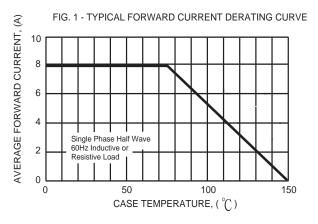
NOTES: 1. Test Conditions: IF = 0.5A, IR = -1.0A, IRR =- 0.25A

Measured at 1 MHz and applied reverse voltage of 4.0 volts.

3. Suffix "R" for Reverse Polarity.

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RATING AND CHARACTERISTIC CURVES (HER801 THRU HER805)





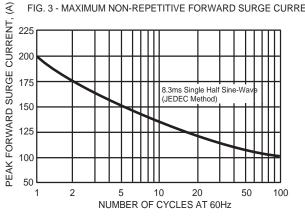


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

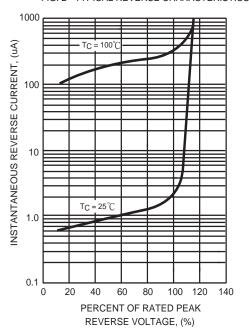


FIG. 4 -MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

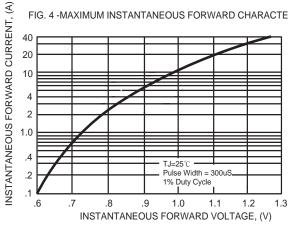
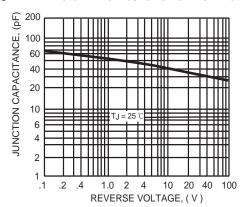
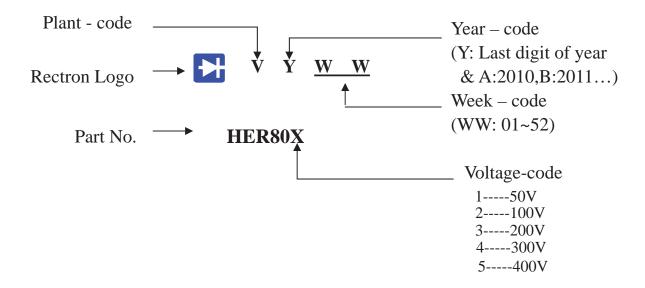


FIG. 5 - TYPICAL JUNCTION CAPACITANCE





Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	WEIGHT(Kg)
(I)TO-220/TO-220(A)	-C	2,000	550*140*92	572*308*120	4,000	11.80

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