



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**HER3001
THRU
HER3005**

TECHNICAL SPECIFICATIONS OF HIGH EFFICIENCY RECTIFIER

VOLTAGE RANGE - 50 to 400 Volts

CURRENT - 30 Amperes

FEATURES

- * Low power loss, high efficiency
- * Low forward voltage drop
- * Low thermal resistance
- * High current capability
- * High reliability
- * 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: 5.60 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

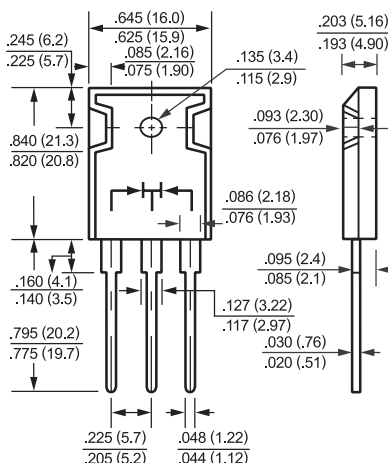
Ratings at 25 °C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.



TO-3P



Dimensions in inches and (millimeters)

	SYMBOL	HER3001	HER3002	HER3003	HER3004	HER3005	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	IO	30					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	400					Amps
Maximum Instantaneous Forward Voltage at 15 0A DC	VF	1.1					Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@Tc = 25°C @Tc = 100°C	IR	10				uAmps
			150				
Maximum Reverse Recovery Time (Note 1)	trr	60			nSec		
Typical Thermal Resistance	RθJC	1.0			°C/W		
Typical Junction Capacitance (Note 2)	CJ	125			pF		
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 150			°C		

NOTES : 1. Test Conditions: I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. Suffix "A" = Common Anode.

RATING AND CHARACTERISTIC CURVES (HER3001 THRU HER3005)

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

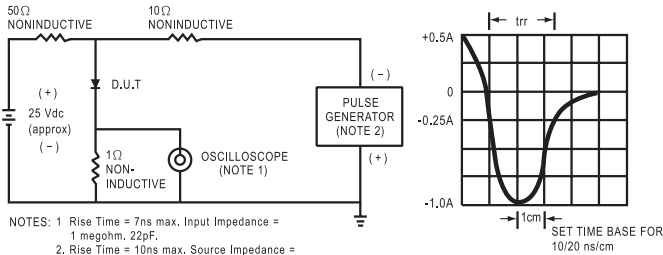


FIG.2 - TYPICAL FORWARD CURRENT DERATING CURVE

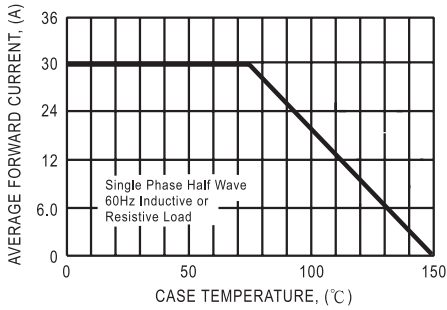


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

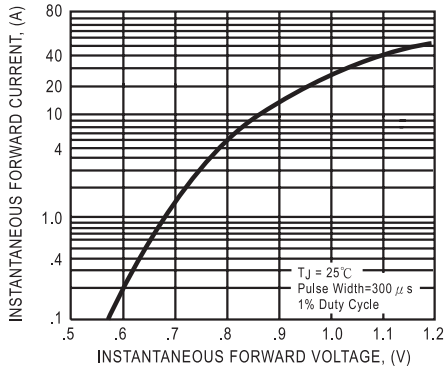


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

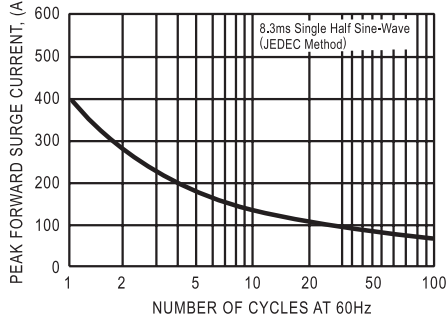


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

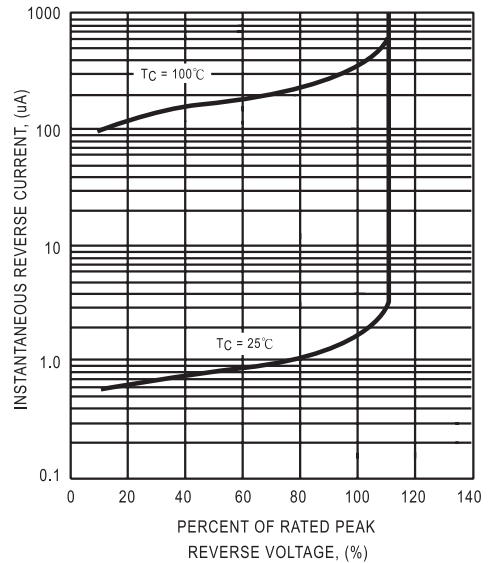
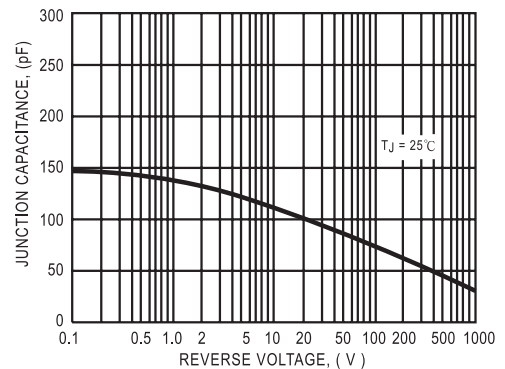


FIG. 6 - TYPICAL JUNCTION CAPACITANCE



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