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*

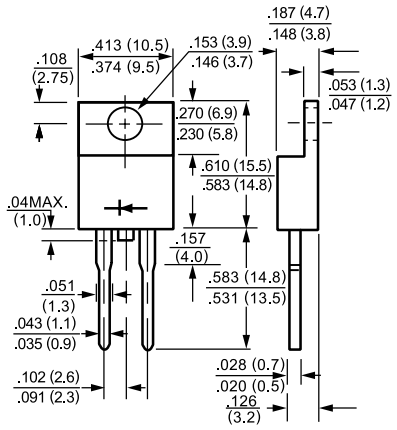
FEATURES

* 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

TO-220A



Dimensions in inches and (millimeters)

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%.

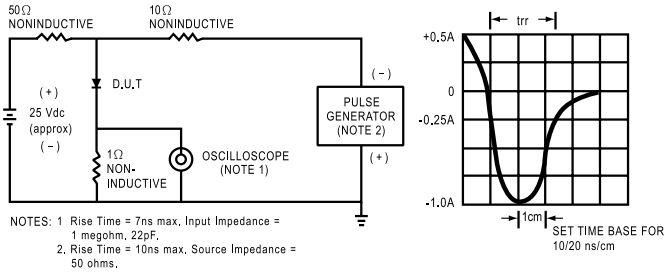
		SYMBOL	HER801	HER802	HER803	HER804	HER805	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	300	400	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	210	280	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	300	Volts
Maximum Average Forward Rectified Current at T_C = 75°C		I_O	8.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	300					Amps
Maximum Instantaneous Forward Voltage at 8.0A DC		V_F	1.1					Volts
Maximum DC Reverse Current	@T_C = 25°C	I_R	10					uAmps
at Rated DC Blocking Voltage	@T_C = 100°C		150					
Maximum Reverse Recovery Time (Note 1)		trr	60					nSec
Typical Thermal Resistance		$R_{\theta JC}$	2.5					°C/W
Typical Junction Capacitance (Note 2)		C_J	40					pF
Operating and Storage Temperature Range		$T_{J, TSTG}$	-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 "R" for Reverse Polarity.

NEXT BACK EXIT

RATING AND CHARACTERISTIC CURVES (HER801 THRU HER805)

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



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

FIG.2 - TYPICAL FORWARD CURRENT DERATING CURVE

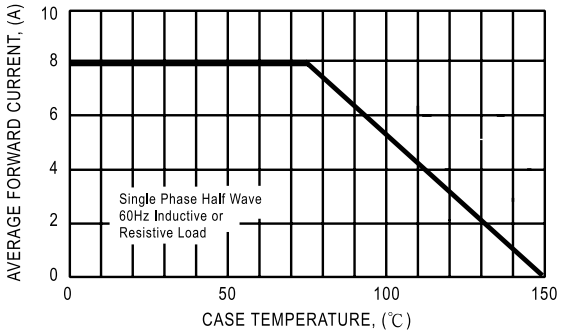


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

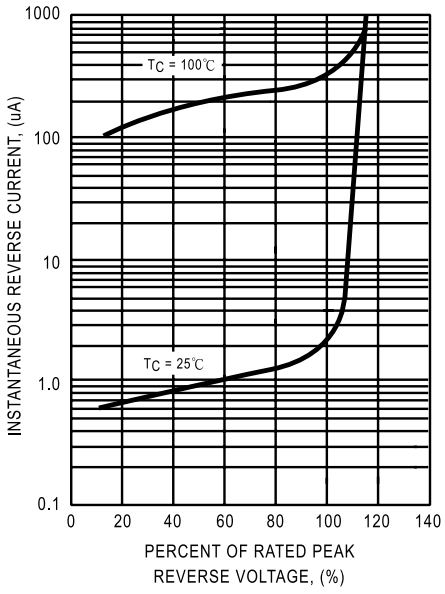


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

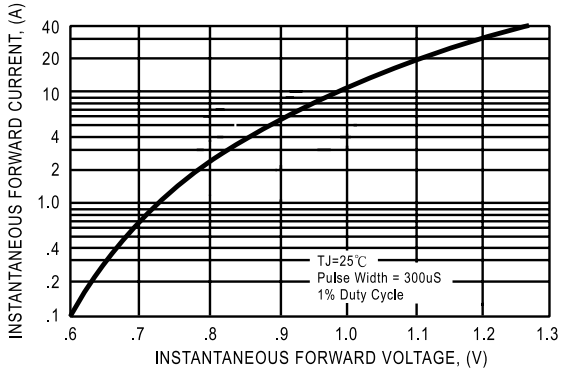


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

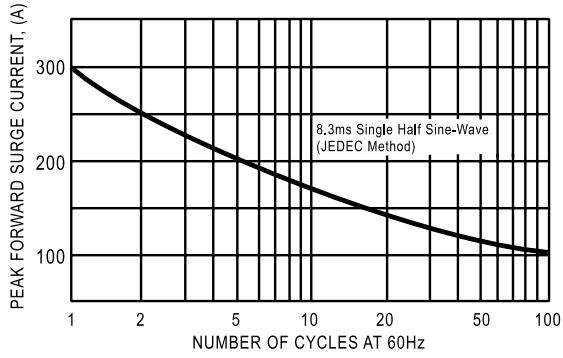


FIG. 6 - TYPICAL JUNCTION CAPACITANCE