

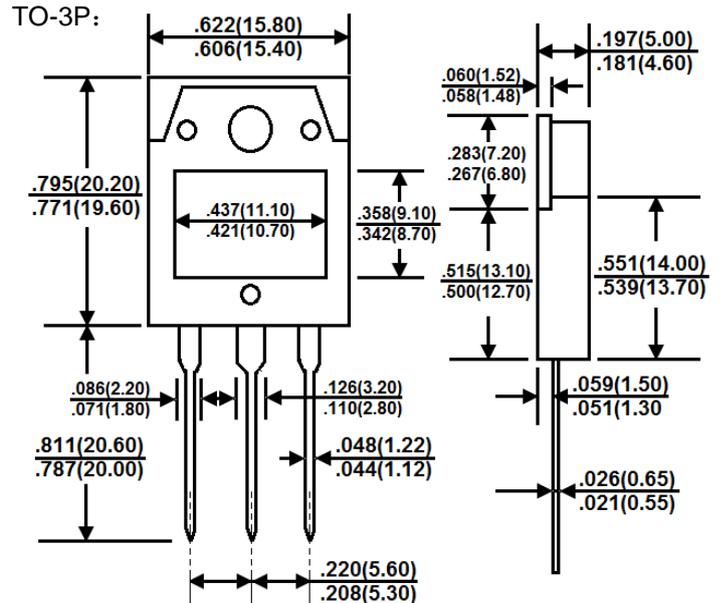
Features

- * Glass passivated chip junctions
- * Superfast recovery time, high voltage
- * Low forward voltage, high current capability
- * Low thermal resistance
- * Low power loss, high efficiency



RoHS
COMPLIANT

Package Outline Dimensions in inches (millimeters)



Mechanical Data

- * Case: TO-247AD (TO-3P)
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Pure tin plated, lead free. Solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity: As marked
- * High temperature soldering guaranteed: 260°C/10 seconds 16".,(4.06mm) from case.

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%.

Type Number	Symbol	HER 3001 PT	HER 3002 PT	HER 3003 PT	HER 3004 PT	HER 3005 PT	HER 3006 PT	HER 3007 PT	HER 3008 PT	Unit	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	480	560	700	V	
Maximum D.C Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current	$I_{F(AV)}$	30								A	
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	300								A	
Maximum Instantaneous Forward Voltage (Note 1) @ $I_F=15A$	V_F	1.0			1.3		1.7			V	
Maximum D.C Reverse Current @ $T_J=25^\circ C$ at Rated D.C Blocking Voltage @ $T_J=125^\circ C$	I_R	10 500								μA	
Maximum Reverse Recovery Time (Note 2)	T_{rr}	50					80				nS
Typical Junction Capacitance (Note 3)	C_j	175					145				pF
Typical Thermal Resistance	$R_{\theta JC}$	1.4								$^\circ C/W$	
Operating and Storage Temperature Range	T_J/T_{STG}	-55 to +150								$^\circ C$	

Note:1、 Pulse Test with PW=300 usec, 1% Duty Cycle 2、 Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $IRR=0.25A$

3、 Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

Ratings and Characteristic Curves

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

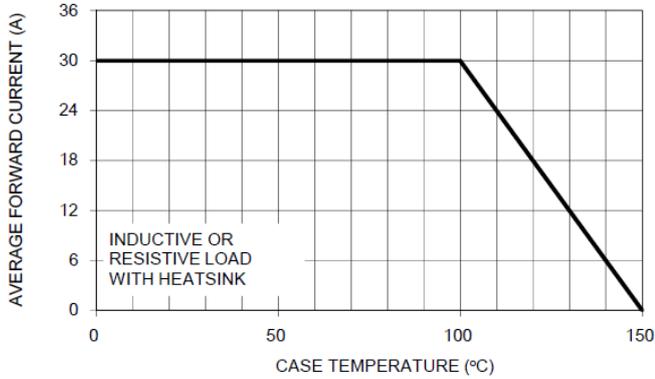


FIG. 2- TYPICAL REVERSE CHARACTERISTICS PER LEG

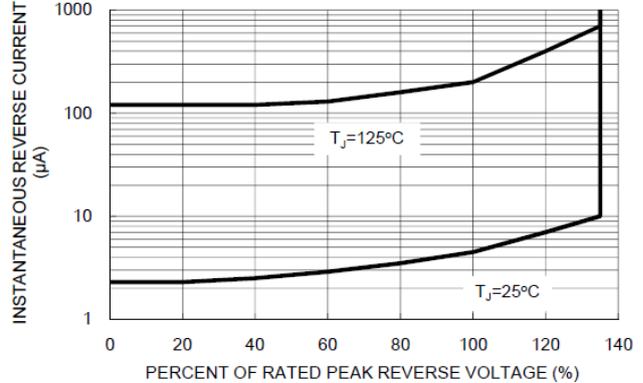


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

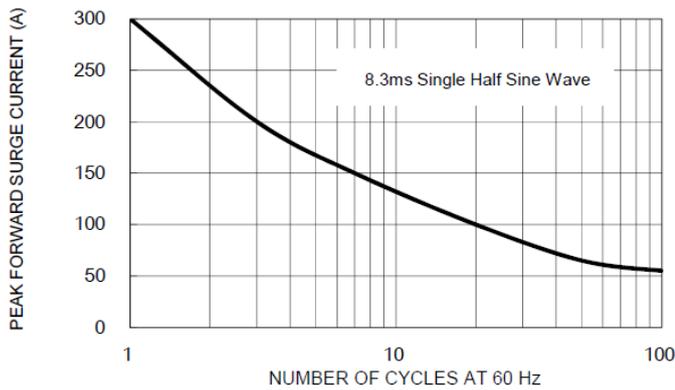


FIG. 5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

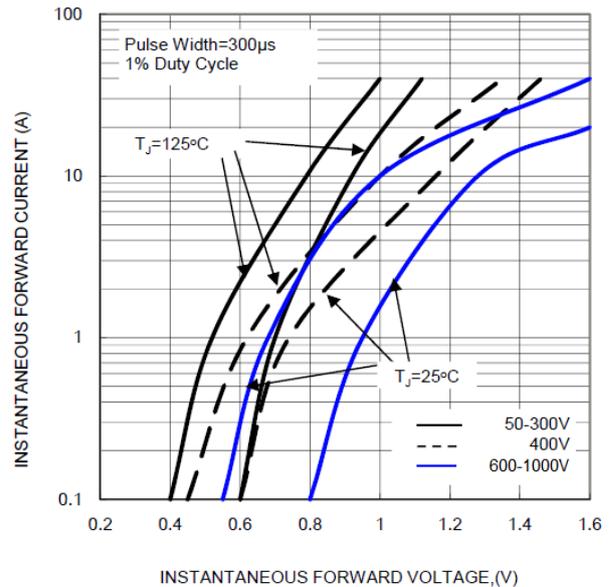


FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG

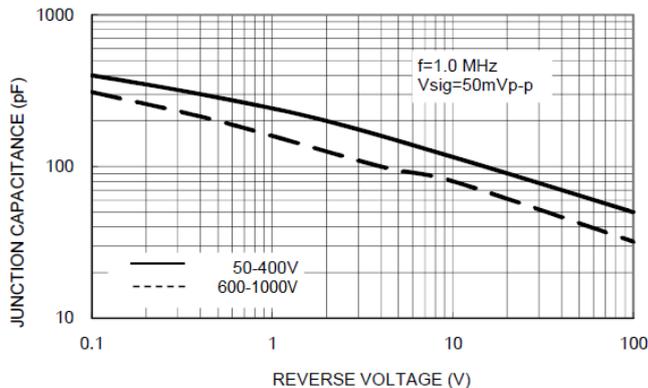
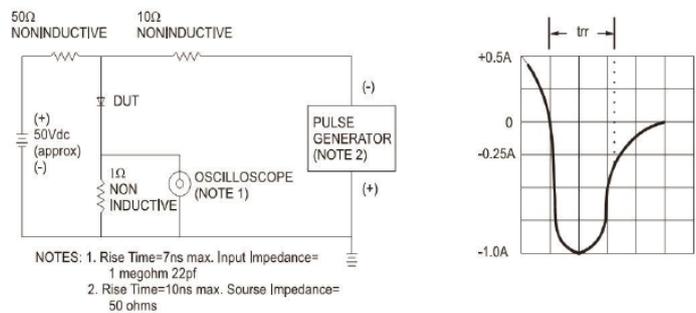


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





HER3001PT THRU HER3008PT

Glass Passivated High Efficient Rectifiers

Ordering Information

Part No.	Package	Packing
HER3001PT~HER3008PT	TO-3P	30pcs/Tube