

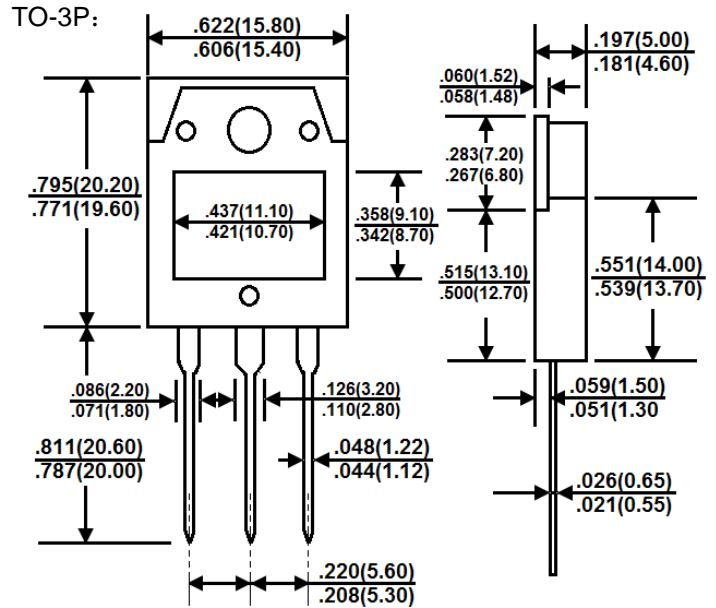
Features

- * 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	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	480	V
Maximum D.C Blocking Voltage	V_{DC}	50	100	200	300	400	600	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

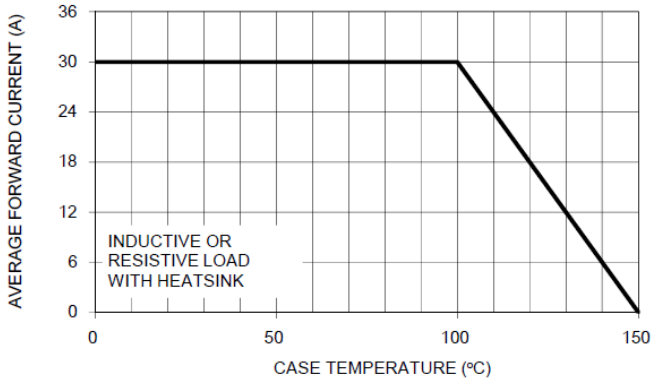


FIG. 2- TYPICAL REVERSE CHARACTERISTICS PER LEG

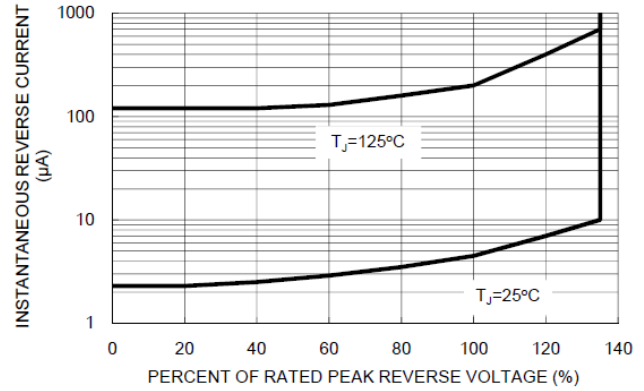


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

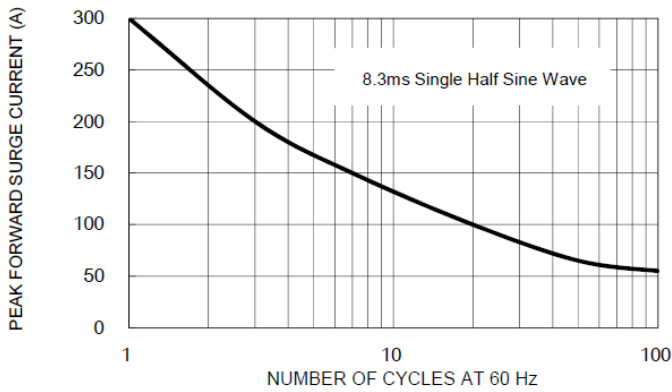


FIG. 5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

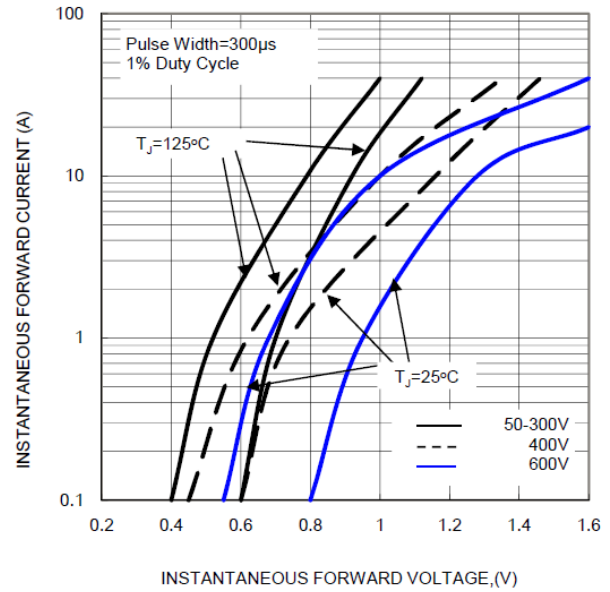


FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG

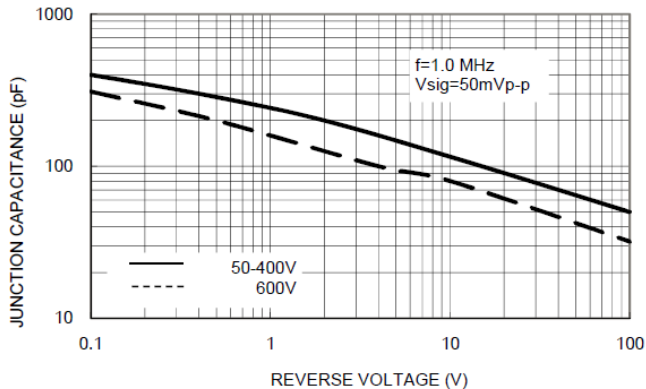
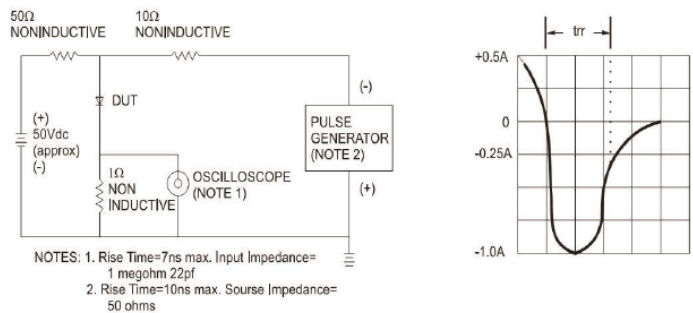


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





HER3001PT THRU HER3006PT

Glass Passivated High Efficient Rectifiers

Ordering Information

Part No.	Package	Packing
HER3001PT~HER3006PT	TO-3P	30pcs/Tube