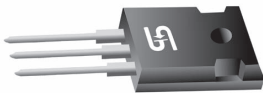




HER3001PT THRU HER3008PT

30.0 AMPS. Glass Passivated High Efficient Rectifiers



Voltage Range
50 to 1000 Volts
Current
30.0 Amperes

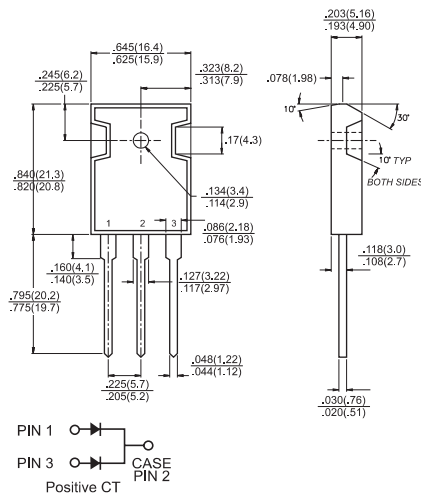
Features

- ✧ Dual rectifier construction, positive center-tap
- ✧ Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- ✧ Glass passivated chip junctions
- ✧ Superfast recovery time, high voltage
- ✧ Low forward voltage, high current capability
- ✧ Low thermal resistance
- ✧ Low power loss, high efficiency
- ✧ High temperature soldering guaranteed:
260°C., .16" (4.06mm) from case for 10 seconds

Mechanical Data

- ✧ Cases: TO-3P/TO-247AD molded plastic
- ✧ Terminals: Leads solderable per MIL-STD-750.
Method 2026
- ✧ Polarity: As marked
- ✧ Mounting position: Any
- ✧ Mounting torque: 10in.-lbs. Max.
- ✧ Weight: 0.2 ounce, 5.6 grams

TO-3P/TO-247AD



Dimensions in inches and (millimeters)

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 3001PT	HER 3002PT	HER 3003PT	HER 3004PT	HER 3005PT	HER 3006PT	HER 3007PT	HER 3008PT	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current @T _C =100°C	I _(AV)	30.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	300								A
Maximum Instantaneous Forward Voltage @15.0A	V _F	1.0				1.3	1.7			V
Maximum DC Reverse Current @ T _C =25°C at Rated DC Blocking Voltage @ T _C =125°C	I _R	10.0 500								uA uA
Maximum Reverse Recovery Time (Note 2) @T _J =25°C	T _{rr}	50					80			nS
Typical Junction Capacitance (Note 1)	C _j	175					145			pF
Operating Temperature Range	T _J	-55 to +150								°C
Storage Temperature Range	T _{STG}	-55 to +150								°C

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts.

2. Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, Recover to 0.25A.

RATINGS AND CHARACTERISTIC CURVES (HER3001PT THRU HER3008PT)

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

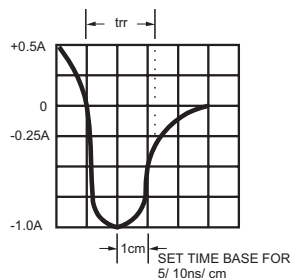
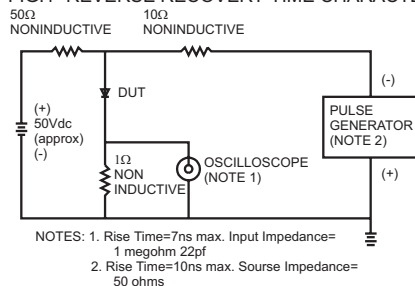


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

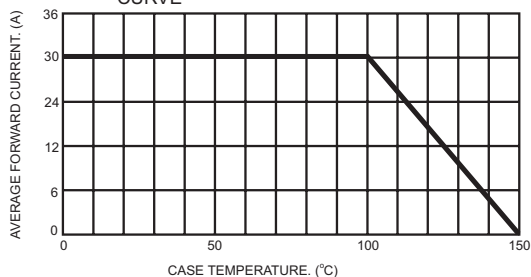


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

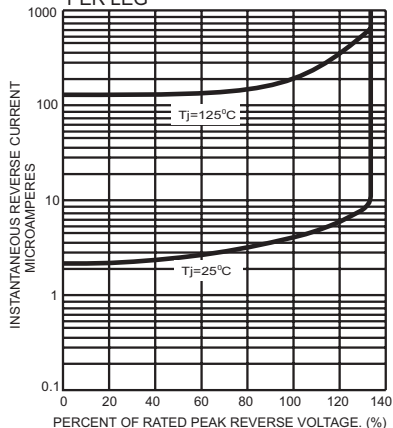


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

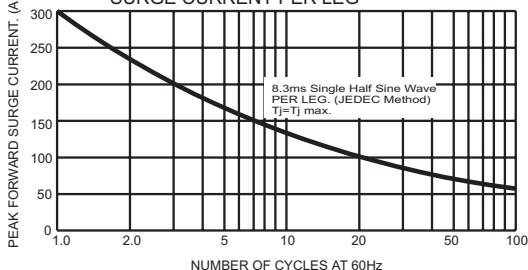


FIG.6- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

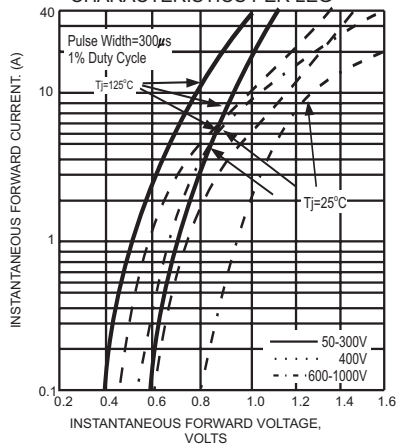


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

