



HER3001PT - HER3008PT

30.0 AMPS. Glass Passivated High Efficient Rectifiers

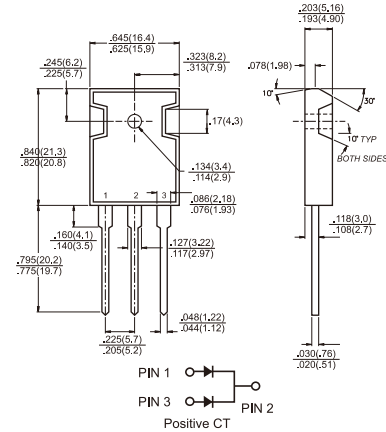
TO-3P/TO-247AD

Features

- ◇ UL Recognized File # E-326243
- ◇ Dual rectifier construction, positive center-tap
- ◇ Plastic package has Underwriters Laboratory Flammability Classification 94V0
- ◇ 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, 0.16"(4.06mm) from case for 10 seconds
- ◇ Green compound with suffix "G" on packing code & prefix "G" on datecode.

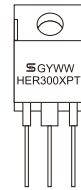
Mechanical Data

- ◇ Cases: TO-3P/TO-247AD molded plastic
- ◇ Terminals: Pure tin plated, lead free solderable per MIL-STD-750. Method 2026
- ◇ Polarity: As marked
- ◇ Mounting position: Any
- ◇ Mounting torque: 10in-lbs. Max.
- ◇ Weight: 5.6 grams



Dimensions in inches and (millimeters)

Marking Diagram



HER300XPT = Specific Device Code
G = Green Compound
Y = Year
WW = Work Week

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	VRRM	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current @Tc =100°C	IF(AV)	30								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	300								A
Maximum Instantaneous Forward Voltage @15.0A	VF	1.0				1.3	1.7			V
Maximum DC Reverse Current at Rated DC Blocking Voltage @TA=25 °C (Note 1) @ TA=125 °C	IR	10 500								uA uA
Maximum Reverse Recovery Time (Note 2) @TJ=25°C	Trr	50					80			nS
Typical Junction Capacitance (Note 3)	Cj	175					145			pF
Operating Temperature Range	TJ	-55 to +150								°C
Storage Temperature Range	TSTG	-55 to +150								°C

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle
2. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, Recover to 0.25A.
3. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts.

RATINGS AND CHARACTERISTIC CURVES (HER3001PT THRU HER3008PT)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

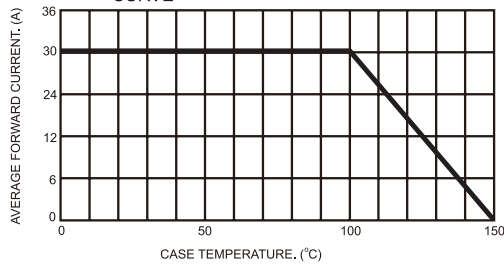


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER LEG

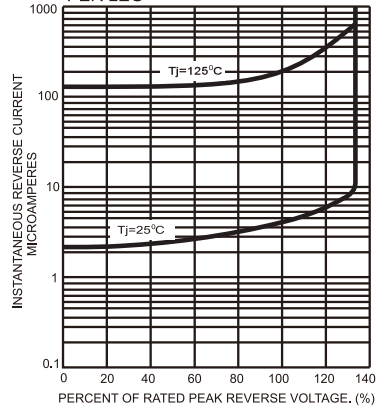


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

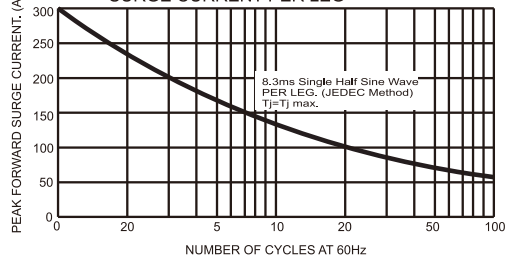


FIG.5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

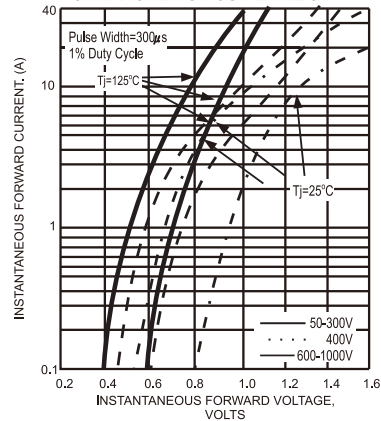


FIG.4- TYPICAL JUNCTION CAPACITANCE PER LEG

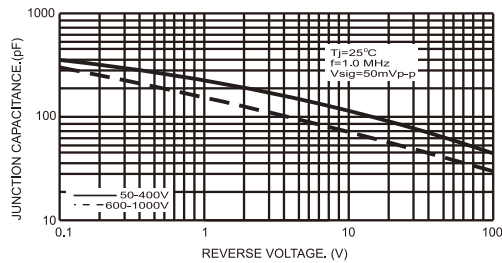


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

