

HER3001PT THRU HER3008PT

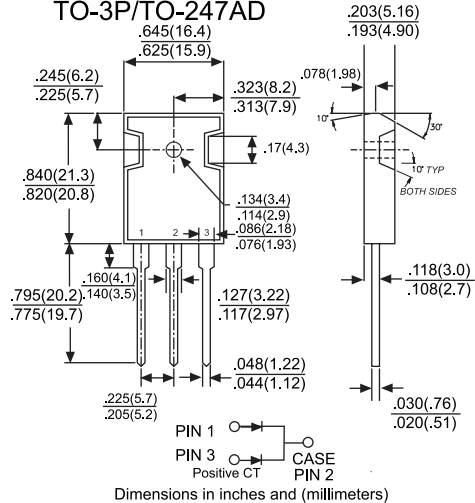
30.0 AMPS. GLASS PASSIVATED HIGH EFFICIENT RECTIFIERS

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-0
- 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: 250°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: 10 in-lbs. Max
- Weight: 0.2 ounce, 5.6 grams

TO-3P/TO-247AD



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number	HER 3001PT	HER 3002PT	HER 3003PT	HER 3004PT	HER 3005PT	HER 3006PT	HER 3007PT	HER 3008PT	UNITS
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	420	560	700	V
Maximum DC Blocking Voltage	V _{DC} 50	100	200	300	50	600	800	1000	V
Maximum Average Forward Rectified Current @ T _c = 100°C	I _{F(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			µA µA
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	-65 to +150							°C
Storage Temperature Range	T _{STG}	-65 to +150							°C

NOTES: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts.
2. Reverse Recovery Test Conditions: I_F = 0.5A, I_R = 1.0A, Recover to 0.25A.

RATING AND CHARACTERISTIC CURVES HER3001PT THRU HER3008PT

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

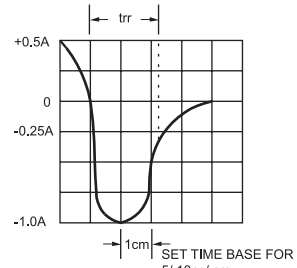
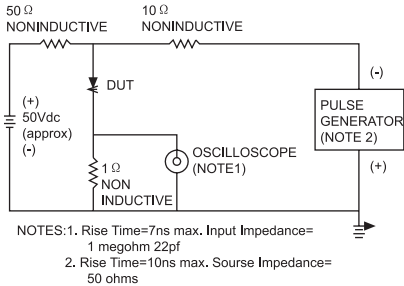


FIG.3-TYPICAL REVERSE CHARACTERISTICS PER LEG

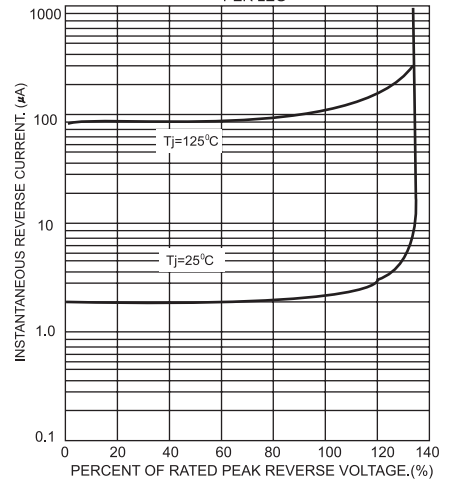


FIG.6-TYPICAL FORWARD CHARACTERISTICS PER LEG

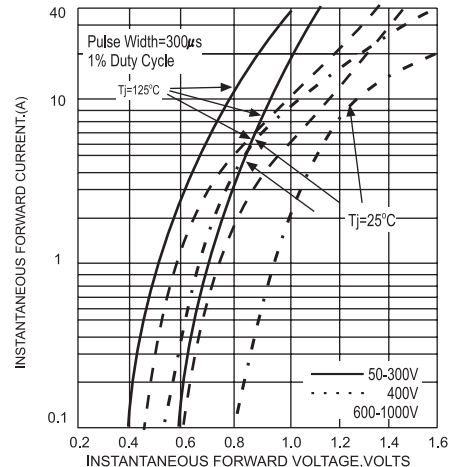


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

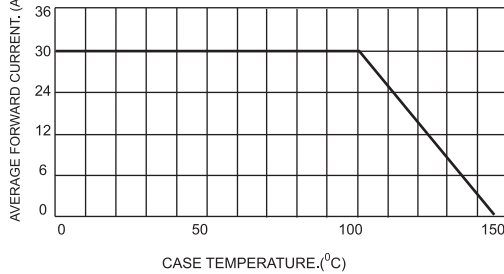


FIG.5-MAXIMUM NON-REPETITIVE SURGE CURRENT

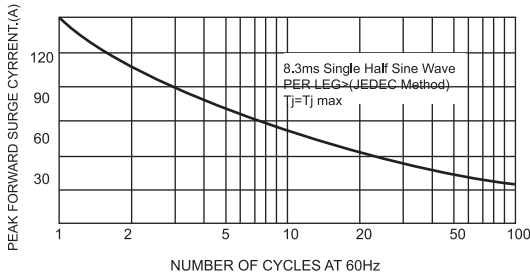


FIG.5-TYPICAL JUNCTION CAPACITANCE PER LEG

