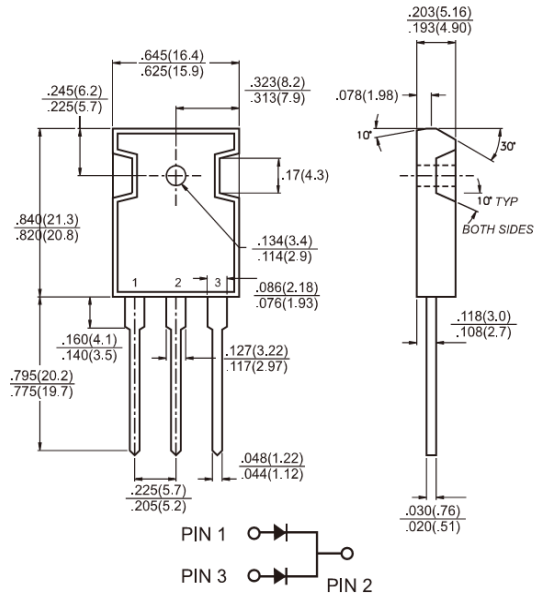




HER1601PT - HER1608PT
16.0AMPS. Glass Passivated High Efficient Rectifiers
TO-3P/TO-247AD

Features

- ✦ UL Recognized File # E-326243
- ✦ Dual rectifier construction, positive center-tap
- ✦ Plastic package has Underwriters Laborator Flammability Classification 94V-0
- ✦ Glass passivated chip junction
- ✦ 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



- HER160XPT = 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 1601PT	HER 1602PT	HER 1603PT	HER 1604PT	HER 1605PT	HER 1606PT	HER 1607PT	HER 1608PT	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 @ $T_C=100^\circ C$	$I_{F(AV)}$	16								A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	200								A	
Maximum Instantaneous Forward Voltage (Note 1) @ 8 A	V_F	1.0				1.3		1.7		V	
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=125^\circ C$	I_R	10				500				uA uA	
Maximum Reverse Recovery Time (Note 2)	T_{rr}	50					80				nS
Typical Junction Capacitance (Note 3)	C_j	85					60				pF
Operating Temperature Range	T_J	- 55 to + 150									$^\circ C$
Storage Temperature Range	T_{STG}	- 55 to + 150									$^\circ C$

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

RATINGS AND CHARACTERISTIC CURVES (HER1601PT THRU HER1608PT)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

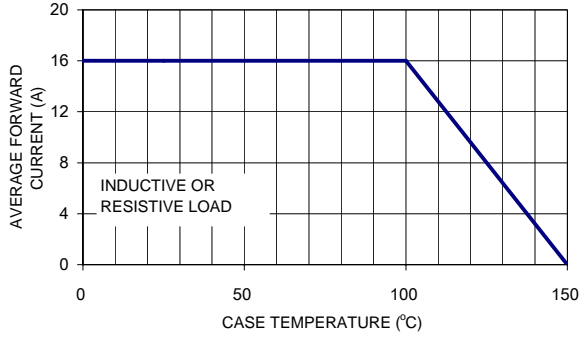


FIG. 2 TYPICAL REVERSE CHARACTERISTICS PER LEG

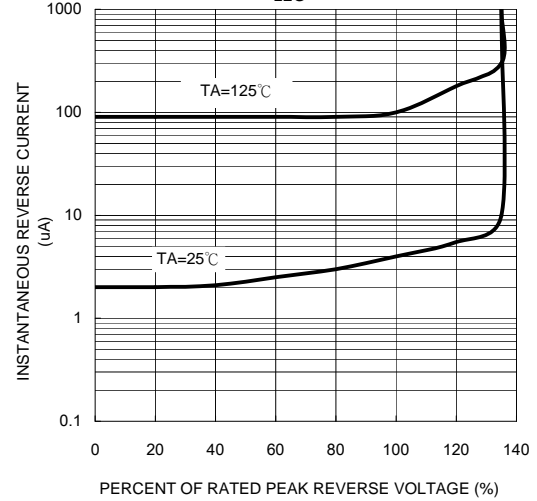


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

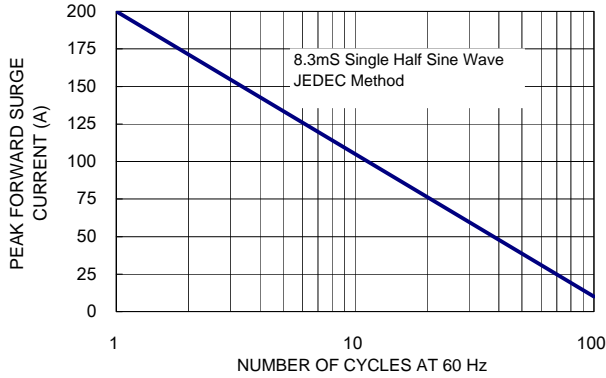


FIG. 5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

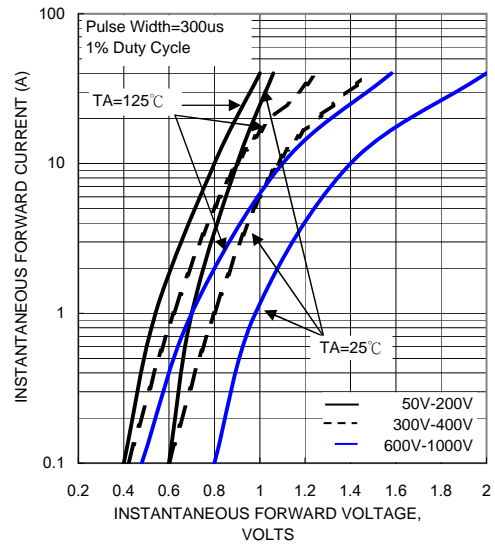


FIG. 4- TYPICAL JUNCTION CAPACITANCE PER LEG

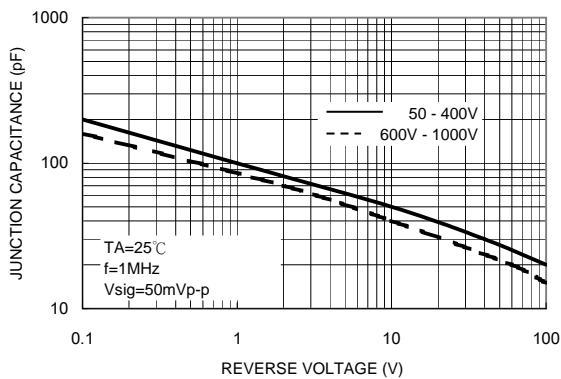


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

