# HER604G

# ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 400V CURRENT: 6.0A



## **FEATURE**

Low power loss High surge capability Ultra-fast recovery time for high efficiency High temperature soldering guaranteed 250 ℃/10sec/0.375″ lead length at 5 lbs tension

## **MECHANICAL DATA**

Terminal: Plated axial leads solderable per

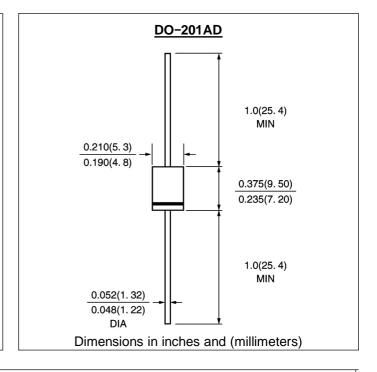
MIL-STD 202E, method 208C

Case: Molded with UL-94 Class V-0 recognized Flame

Retardant Epoxy

Polarity: color band denotes cathode

Mounting position: any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	HER604G	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	400	V
Maximum RMS Voltage	Vrms	280	V
Maximum DC blocking Voltage	Vdc	400	V
Maximum Average Forward Rectified Current 3/8 $^{\prime\prime}$ lead length at Ta =55 $^{\circ}$ C	If(av)	6.0	Α
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	150.0	Α
Maximum Forward Voltage at Forward current and 25 $^{\circ}\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	Vf	1.0	V
Maximum DC Reverse Current $Ta = 25^{\circ}C$ at rated DC blocking voltage $Ta = 125^{\circ}C$	lr	10.0 100.0	μА
Maximum Reverse Recovery Time (Note 1)	Trr	50	nS
Typical Junction Capacitance (Note 2)	Cj	80.0	pF
Typical Thermal Resistance (Note 3)	Rth(ja)	20.0	°C/W
Storage and Operating Junction Temperature	Tstg,Tj	-55 to +150	$^{\circ}\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$

## Note:

- 1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
- 2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- 3. Thermal Resistance from Junction to Ambient at 3/8" lead length, P.C. Board Mounted

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#### **RATINGS AND CHARACTERISTIC CURVES HER604G**

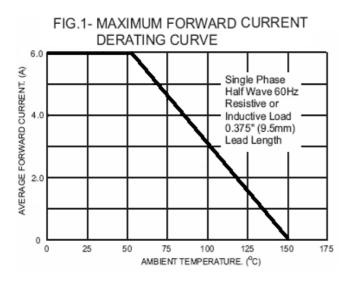


FIG.3- TYPICAL FORWARD CHARACTERISTICS

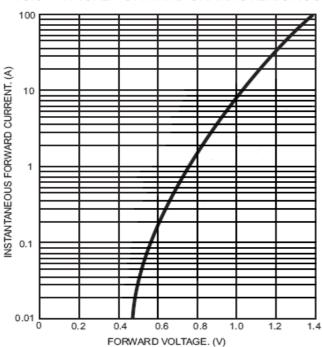


FIG.5- TYPICAL JUNCTION CAPACITANCE 175 150 JUNCTION CAPACITANCE, (pF) 125 100 75 50 25 0 100 200 500 800 0.1 0.5 10 20 50 REVERSE VOLTAGE. (V)

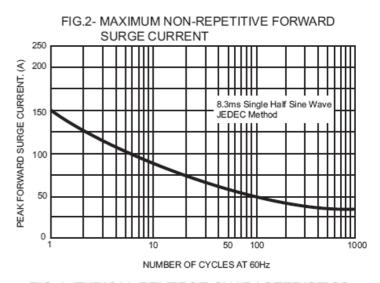
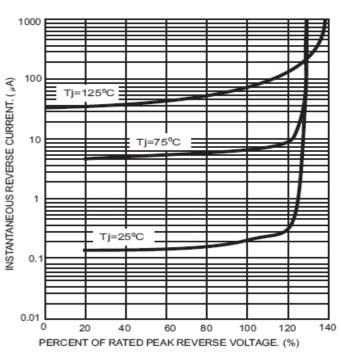


FIG.4- TYPICAL REVERSE CHARACTERISTICS



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