## HER151G THRU HER157G

# ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 50 TO 1000V CURRENT: 1.5A



### **FEATURE**

Low power loss
High surge capability
Glass passivated chip junction
Ultra-fast recovery time for high efficiency
High temperature soldering guaranteed
250 °C/10sec/0.375 " lead length at 5 lbs tension

## **MECHANICAL DATA**

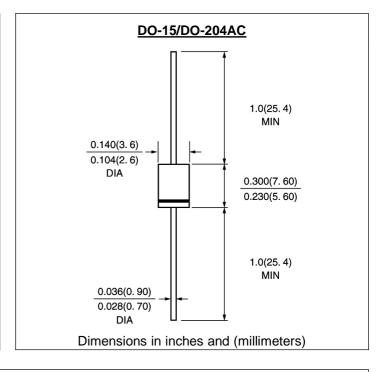
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C

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	HER 151	HER 152	HER 153	HER 154	HER 155	HER 156	HER 157	HER 158	units
	_	_	G	G	G	G	G	G	
Vrrm	50	100	200	300	400	600	800	1000	V
Vrms	35	70	140	210	280	420	560	700	V
Vdc	50	100	200	300	400	600	800	1000	V
lf(av)	1.5							А	
Ifsm	50							А	
Vf	1.0 1.3				1.7		V		
lr.	10.0							μА	
"		100.0						μА	
Trr	50					75			nS
Cj	50				30		pF		
Rth(ja)	25.0						°C/W		
Tstg,Tj	-55 to +150							$^{\circ}$	
	Vrrm Vrms Vdc If(av) Ifsm Vf Ir Cj Rth(ja)	SYMBOL   151   G     Vrrm   50     Vrms   35     Vdc   50     If(av)     Ifsm     Vf     Ir     Trr     Cj     Rth(ja)	SYMBOL   151   152   G   G   G   G   G   G   G   G   G	SYMBOL         151         152         153           G         G         G         G           Vrrm         50         100         200           Vrms         35         70         140           Vdc         50         100         200           If(av)         Ifsm           Vf         1.0           Ir         Trr         50           Cj         50           Rth(ja)         State of the property of the p	SYMBOL         151         152         153         154         G         A         D	SYMBOL         151         152         153         154         155           G         G         G         G         G         G           Vrms         35         70         140         210         280           Vdc         50         100         200         300         400           If(av)         1.5           Ifsm         50           Vf         1.0         1.3           Ir         10.0         100.0           Trr         50           Cj         50           Rth(ja)         25.0	SYMBOL         151 G         152 G         153 G         154 G         155 G         156 G           Vrrm         50         100         200         300         400         600           Vrms         35         70         140         210         280         420           Vdc         50         100         200         300         400         600           If(av)         1.5           Ifsm         50           Vf         1.0         1.3           Ir         10.0           100.0         100.0           Trr         50           Cj         50           Rth(ja)         25.0	SYMBOL         151         152         153         154         155         156         157           G	SYMBOL         151         152         153         154         155         156         157         158           Vrrm         50         100         200         300         400         600         800         1000           Vrms         35         70         140         210         280         420         560         700           Vdc         50         100         200         300         400         600         800         1000           If(av)         1.5         50         1.3         1.7           Ir         10.0         100.0         100.0         75         75           Cj         50         30         30         25.0

#### 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

Rev.A1 www.gulfsemi.com

#### RATINGS AND CHARACTERISTIC CURVES UF2001 THRU UF2007

FIG.1- MAXIMUM FORWARD

CURRENT DERATING CURVE

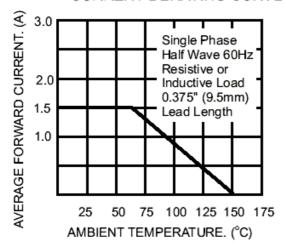


FIG.2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

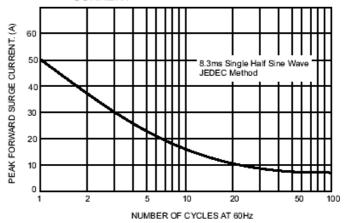


FIG.3- TYPICAL FORWARD CHARACTERISTICS

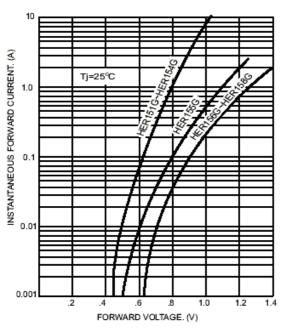


FIG.4- TYPICAL REVERSE CHARACTERISTICS

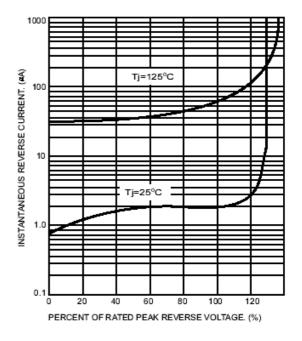
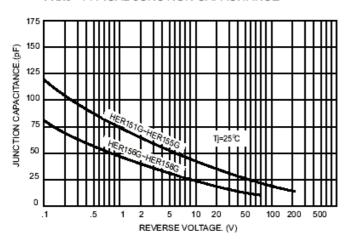


FIG.5- TYPICAL JUNCTION CAPACITANCE



<sup>1</sup> Rev.A1 www.gulfsemi.com