



# HIGH EFFICIENCY GLASS PASSIVATED RECTIFIER

### **VOLTAGE 600 Volts CURRENT 4.0 Ampere**

#### **FEATURES**

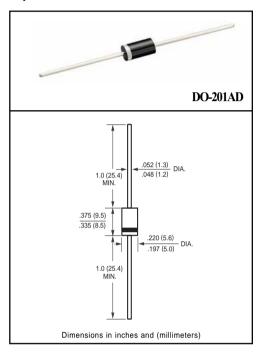
- \* Glass passivated junction
- \* Low power loss, high efficiency
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability
- \* High speed switching
- \* High reliability
- \* High current surge

#### **MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: Device has UL flammability classification 94V-O
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any \* Weight: 1.20 grams

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.



#### MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	HER406G	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	600	Volts
Maximum RMS Voltage	VRMS	420	Volts
Maximum DC Blocking Voltage	VDC	600	Volts
Maximum Average Forward Rectified Current at TA= 50°C	lo	4.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	150	Amps
Typical Junction Capacitance (Note 2)	Cı	50	pF
Operating and Storage Temperature Range	TJ. TSTG	-65 to + 175	۰c

#### ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	HER406G	UNITS
Maximum Instantaneous Forward Voltage at 4.0A DC	VF	1.28	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage TA = 25°C		10	uAmps
Maximum Full Load Reverse Current Average, Full Cycle .375" (9.5mm) lead length at TL = 55°C	IR IR	150	uAmps
Maximum Reverse Recovery Time (Note 1)	trr	50	nSec

NOTES: 1. Test Conditions: IF = 0.5A, IR = -1.0A, IRR =- 0.25A

## RATING AND CHARACTERISTIC CURVES (HER406G)

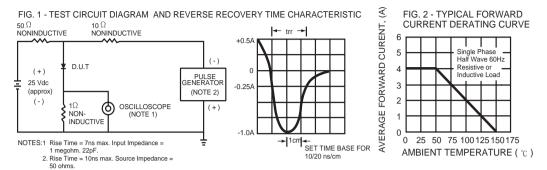
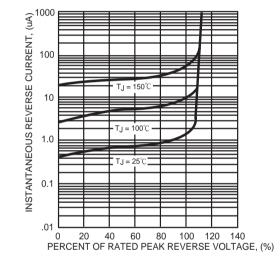
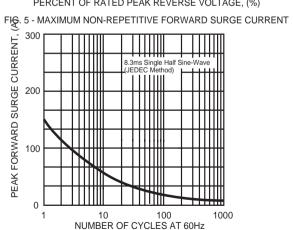
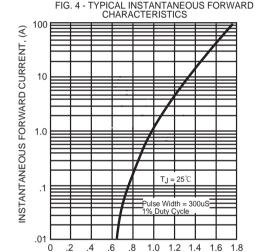
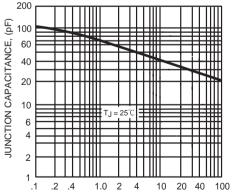


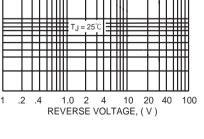
FIG. 3 - TYPICAL REVERSE CHARACTERISTICS











INSTANTANEOUS FORWARD VOLTAGE, (V)

FIG. 6 - TYPICAL JUNCTION CAPACITANCE

