

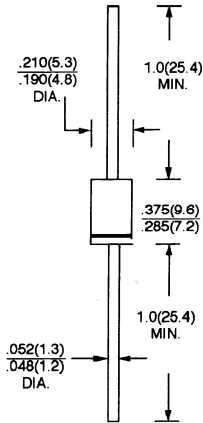


# UF5400G THRU UF5408G

## GLASS PASSIVATED SUPER FAST RECTIFIER

Reverse Voltage - 50 to 800 Volts Forward Current – 3.0 Ampere

DO-201AD



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ High reliability
- ◆ High surge current capability

### MECHANICAL DATA

**Case:** Molded plastic

**Epoxy:** UL 94V-0 rate flame retardant

**Lead:** Axial leads, solderable per MIL-STD-202, method 208 guaranteed

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 1.18 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, For capacitive load current derate by 20%.

TYPE NUMBER	SYMBOLS	HER 5400G	HER 5401G	HER 5402G	HER 5404G	HER 5406G	HER 5407G	HER 5408G	UNITS
Maximum Recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	430	560	700	VOLTS
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375"(9.5mm) lead length at $T_A=50^\circ\text{C}$	$I_{(AV)}$	3.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	100							Amps
Maximum instantaneous forward voltage at 3.0A NOTE1)	$V_F$	1.1				1.4			Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	$I_R$	10.0 200							$\mu\text{A}$
Maximum reverse recovery time (NOTE 2)	$t_{rr}$	50					75		ns
Typical junction capacitance (NOTE 3)	$C_J$	80					50		pF
Operating junction and storage temperature range	$T_J, T_{STG}$	-65 to +150							$^\circ\text{C}$

**Note:** 1. Each lead mounted on a 0.8X0.8X0.04"(20X20X1mm) copper heat-sink

2. Reverse recovery test condition  $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$

3. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

# RATINGS AND CHARACTERISTIC CURVES UF5400G THRU UF5408G

FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS

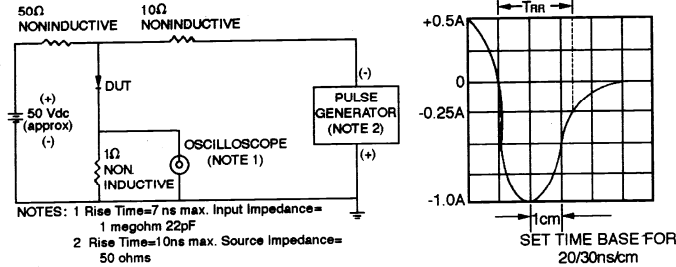


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

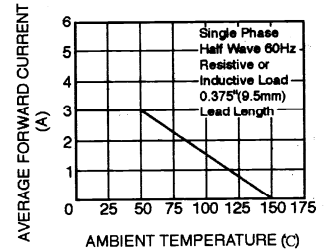


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

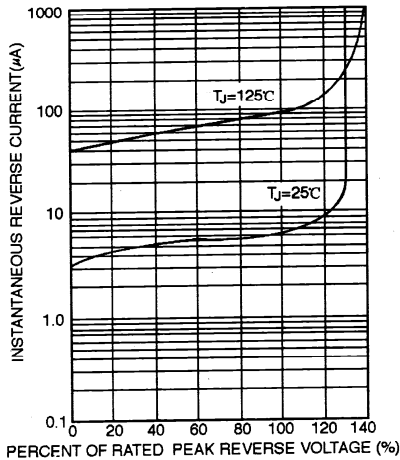


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

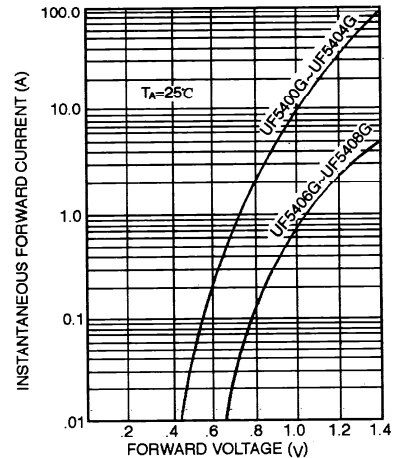


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

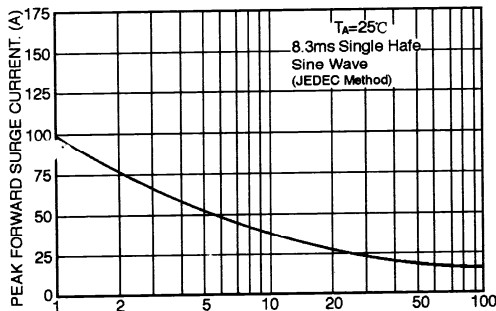


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

