# DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**MP8005G THRU MP810G**

*TECHNICAL SPECIFICATIONS OF SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER*

*VOLTAGE RANGE - 50 to 1000 Volts* *CURRENT - 8.0 Amperes*

## FEATURES

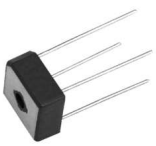
* Surge overload rating: 240 Amperes peak
* Low forward voltage drop
* Small size: simple installation
* Glass passivated junction

## MECHANICAL DATA

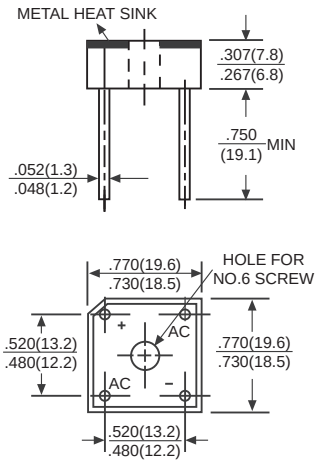
* Case: Molded plastic with heatsink
* Epoxy: UL 94V-0 rate flame retardant
* Lead: MIL-STD-202E, Method 208 guaranteed
* Polarity: Symbols molded or marked on body
* Mounting position: Any
* Weight: 7.4 grams

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, derate current by 20%.



MP-8




Dimensions in inches and (millimeters)

| | | SYMBOL | MP8005G | MP801G | MP802G | MP804G | MP806G | MP808G | MP810G | UNITS |
|---|---|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Bridge Input Voltage | | $V_{RMS}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | | $V_{DC}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Output Current at $T_C$ = 50°C | | $I_O$ | 8.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) | | $I_{FSM}$ | 240 | | | | | | | Amps |
| Maximum Forward Voltage Drop per element at 4.0A DC | | $V_F$ | 1.1 | | | | | | | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage per element | @$T_A$= 25°C | $I_R$ | 10 | | | | | | | µAmps |
| | @$T_C$= 100°C | | 500 | | | | | | | |
| Operating Temperature Range | | $T_J$ | -55 to +150 | | | | | | | °C |
| Storage Temperature Range | | $T_{STG}$ | -55 to +150 | | | | | | | °C |

# RATING AND CHARACTERISTIC CURVES (MP8005G THRU MP810G)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

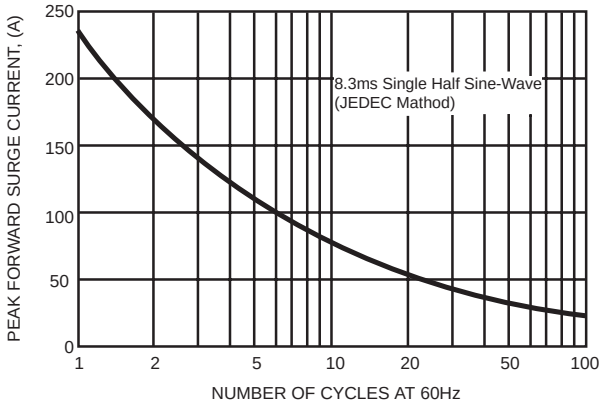



FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

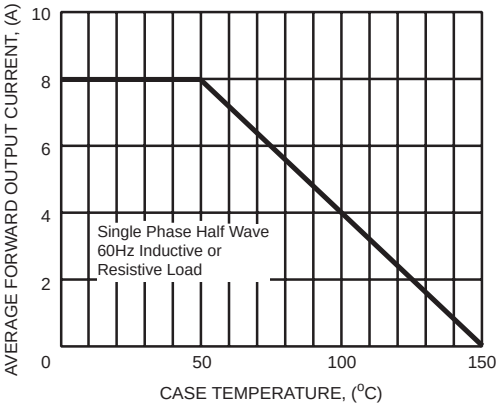



FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

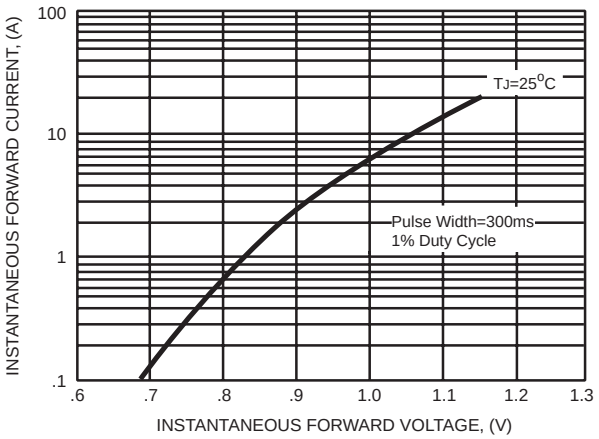
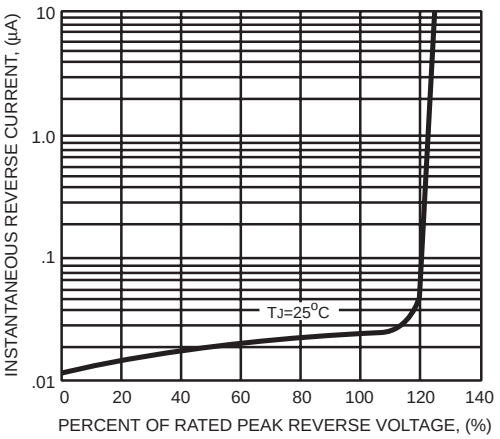



FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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