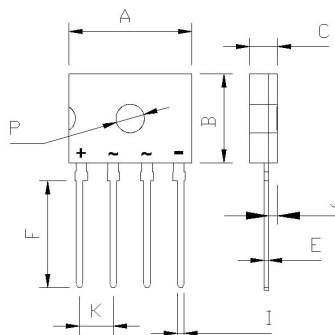


### FEATURES

- Rating to 1000V PRV
- Surge overload rating to 60 Amperes peak
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208



| D3K                  |             |       |
|----------------------|-------------|-------|
| Dim                  | Min         | Max   |
| A                    | 13.65       | 14.15 |
| B                    | 9.80        | 10.20 |
| C                    | 2.95        | 3.25  |
| E                    | 0.35        | 0.65  |
| F                    | 11.70       | 12.30 |
| I                    | 0.65        | 0.95  |
| J                    | 0.90        | 1.20  |
| K                    | 3.60        | 4.00  |
| P                    | Ø3.2Typical |       |
| All Dimensions in mm |             |       |

### Maximum Ratings(@TA = 25°C unless otherwise specified)

| Characteristic                                                                          | Symbol      | LGE 6005 | LGE 601 | LGE 602 | LGE 604 | LGE 606 | LGE 608 | LGE 610 | UNITS |
|-----------------------------------------------------------------------------------------|-------------|----------|---------|---------|---------|---------|---------|---------|-------|
| Maximum recurrent peak reverse voltage                                                  | $V_{RRM}$   | 50       | 100     | 200     | 400     | 600     | 800     | 1000    | V     |
| Maximum RMS voltage                                                                     | $V_{RMS}$   | 35       | 70      | 140     | 280     | 420     | 560     | 700     | V     |
| Maximum DC blocking voltage                                                             | $V_{DC}$    | 50       | 100     | 200     | 400     | 600     | 800     | 1000    | V     |
| 50Hz sine wave, R-load Without heat sink Ta=25°C                                        | $I_{F(AV)}$ | 6.0      |         |         |         |         |         |         | A     |
| Peak forward surge current<br>8.3ms single half-sine-wave<br>superimposed on rated load | $I_{FSM}$   | 170      |         |         |         |         |         |         | A     |
| $I^2t$ Rating for fusing @Tj=25°C                                                       | $I^2t$      | 120      |         |         |         |         |         |         | A²S   |

### Thermal Characteristics

| Characteristic                       | Symbol          | Value           | UNITS |
|--------------------------------------|-----------------|-----------------|-------|
| Typical Thermal Resistance (Note)    | $R_{\theta JA}$ | 15.9            | °C/W  |
|                                      | $R_{\theta JC}$ | 11.2            |       |
|                                      | $R_{\theta JL}$ | 11.1            |       |
| Operating junction temperature range | $T_J$           | - 55 ---- + 150 | °C    |
| Storage temperature range            | $T_{STG}$       | - 55 ---- + 150 | °C    |

### Electrical Characteristics (@TA = 25°C unless otherwise specified)

| Characteristic                              | Symbol | Value | UNITS |
|---------------------------------------------|--------|-------|-------|
| Maximum instantaneous forward voltage @3.0A | $V_F$  | 1.0   | V     |
| Maximum reverse current @TA=25°C            | $I_R$  | 5.0   | μA    |
| at rated DC blocking voltage @TA=100°C      |        | 500   |       |

## RATINGS AND CHARACTERISTICS CURVES

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

FIG1:  $I_o$ - $T_a$  Curve

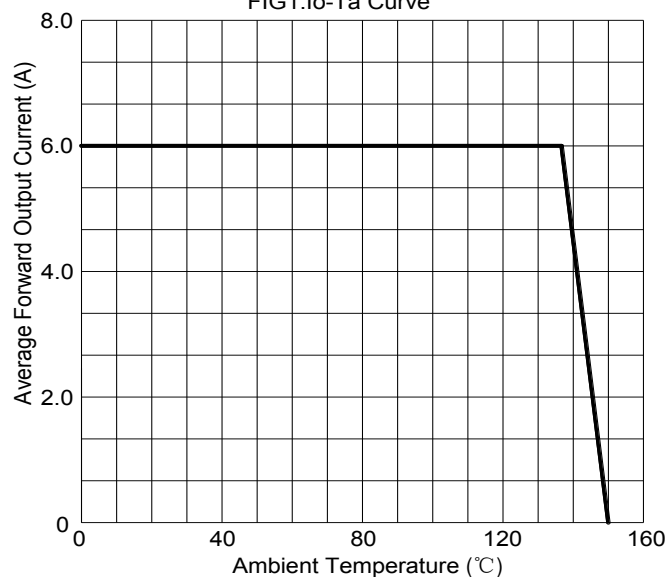


FIG2: Surge Forward Current Capability

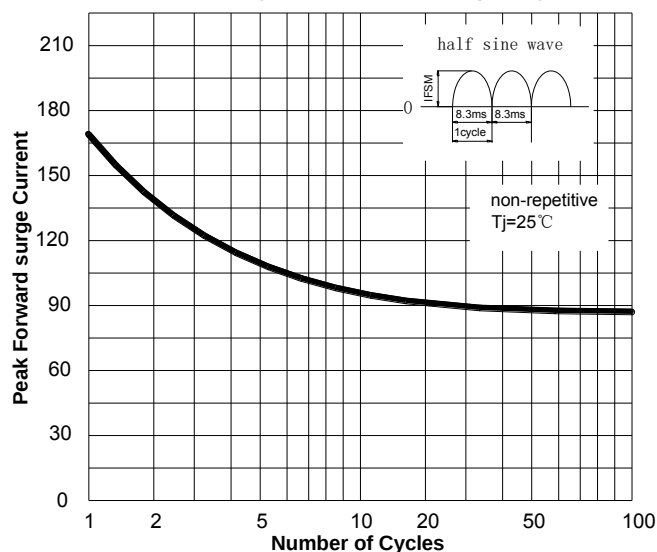


FIG3: Forward Voltage

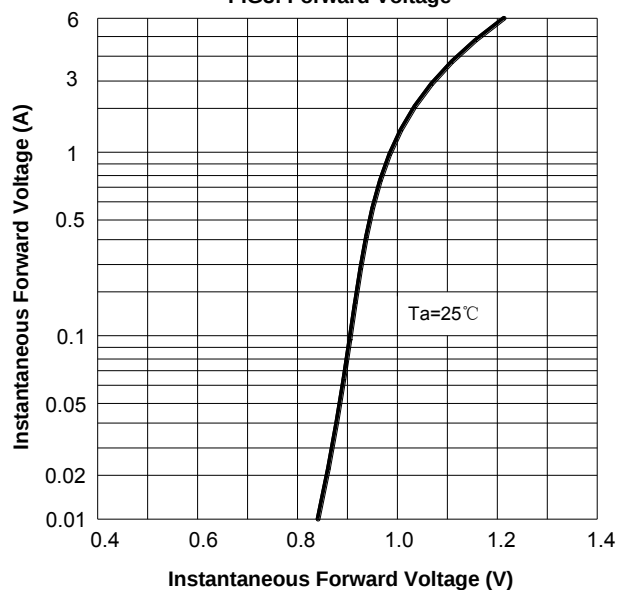


FIG4: Typical Reverse Characteristics

