

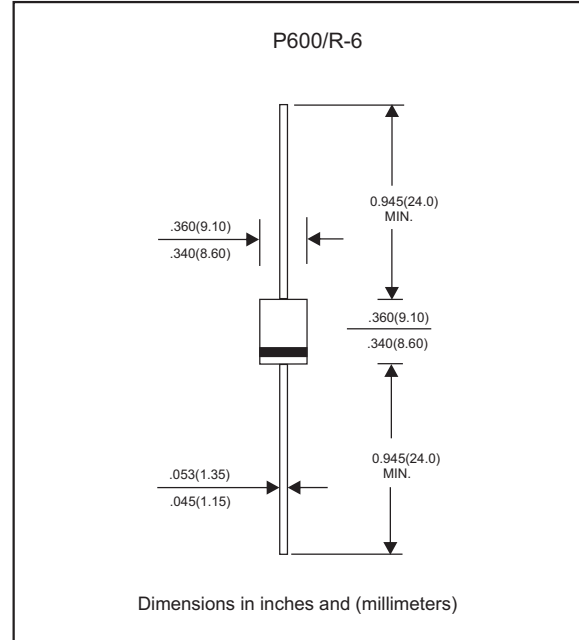
### Features

- Axial lead type devices for through hole design.
- High current capability.
- High surge capability.
- Glass passivated chip junction.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228
- Suffix "-H" indicates Halogen-free parts

### Mechanical data

- Epoxy : UL94-V0 rated flame retardant
- Case : Molded plastic, P600/R-6
- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position : Any

### Package outline



### Maximum ratings and Electrical Characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

| PARAMETER                  | CONDITIONS                                      | Symbol          | MIN. | TYP. | MAX. | UNIT                        |
|----------------------------|-------------------------------------------------|-----------------|------|------|------|-----------------------------|
| Forward rectified current  | See Fig.1                                       | $I_O$           |      |      | 6.0  | A                           |
| Forward surge current      | 8.3ms single half sine-wave (JEDEC methode)     | $I_{FSM}$       |      |      | 200  | A                           |
| Reverse current            | $V_R = V_{RRM} \quad T_J = 25^{\circ}\text{C}$  | $I_R$           |      |      | 10   | $\mu\text{A}$               |
|                            | $V_R = V_{RRM} \quad T_J = 100^{\circ}\text{C}$ |                 |      |      | 500  |                             |
| Thermal resistance         | Junction to ambient                             | $R_{\theta JA}$ |      | 40   |      | $^{\circ}\text{C}/\text{W}$ |
| Diode junction capacitance | f=1MHz and applied 4V DC reverse voltage        | $C_J$           |      | 100  |      | pF                          |
| Storage temperature        |                                                 | $T_{STG}$       | -65  |      | +175 | $^{\circ}\text{C}$          |

| SYMBOLS | $V_{RRM}^{*1}$<br>(V) | $V_{RMS}^{*2}$<br>(V) | $V_R^{*3}$<br>(V) | $V_F^{*4}$<br>(V) | Operating temperature<br>$T_J, (^{\circ}\text{C})$ |
|---------|-----------------------|-----------------------|-------------------|-------------------|----------------------------------------------------|
| 6A05G   | 50                    | 35                    | 50                | 1.00              | -55 to +150                                        |
| 6A1G    | 100                   | 70                    | 100               |                   |                                                    |
| 6A2G    | 200                   | 140                   | 200               |                   |                                                    |
| 6A4G    | 400                   | 280                   | 400               |                   |                                                    |
| 6A6G    | 600                   | 420                   | 600               |                   |                                                    |
| 6A8G    | 800                   | 560                   | 800               |                   |                                                    |
| 6A10G   | 1000                  | 700                   | 1000              |                   |                                                    |

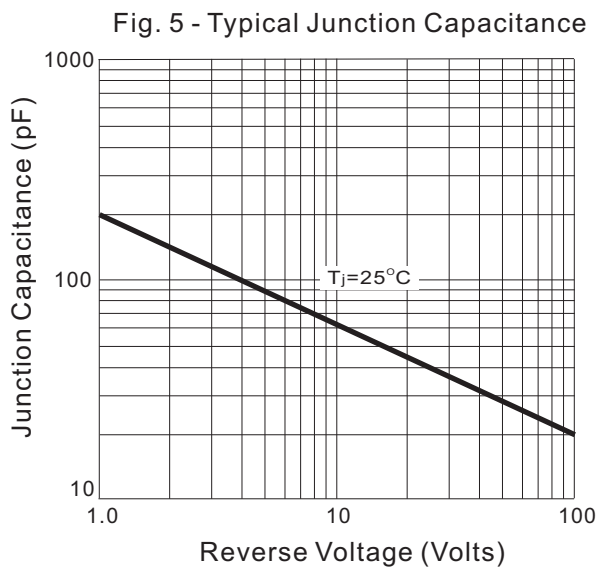
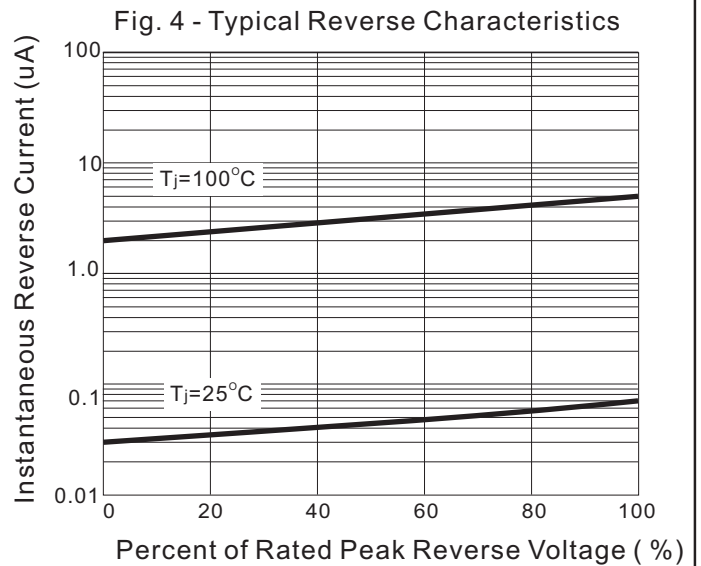
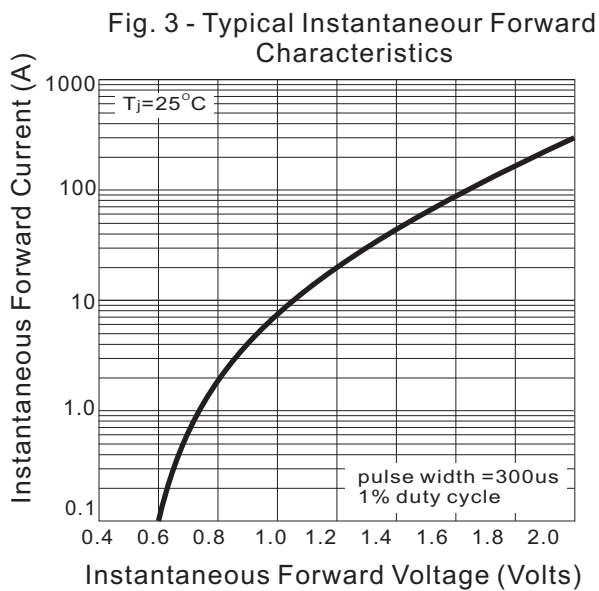
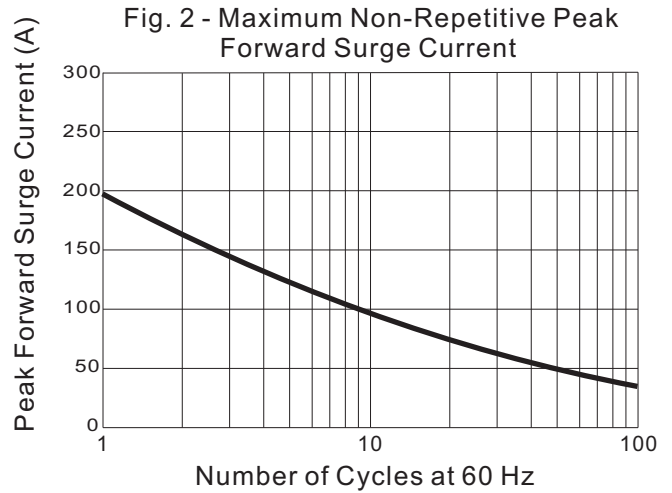
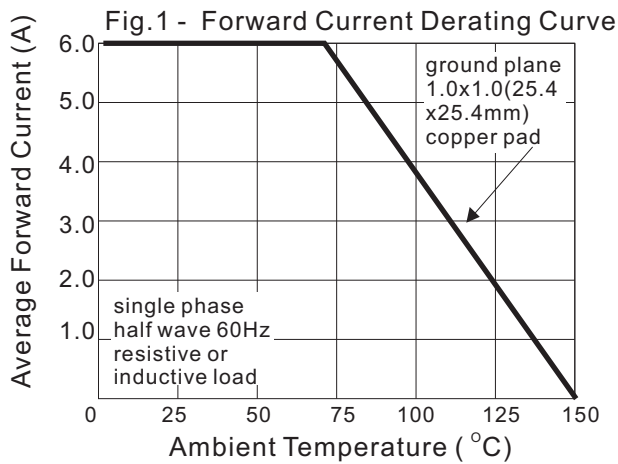
\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage@ $I_F=6.0\text{A}$

## Rating and characteristic curves (6A05G THRU 6A10G)



### Pinning information

| Pin                        | Simplified outline                                                                 | Symbol                                                                              |
|----------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Pin1 cathode<br>Pin2 anode |  |  |

### Marking

| Type number | Marking code |
|-------------|--------------|
| 6A05G       | 6A05G        |
| 6A1G        | 6A1G         |
| 6A2G        | 6A2G         |
| 6A4G        | 6A4G         |
| 6A6G        | 6A6G         |
| 6A8G        | 6A8G         |
| 6A10G       | 6A10G        |