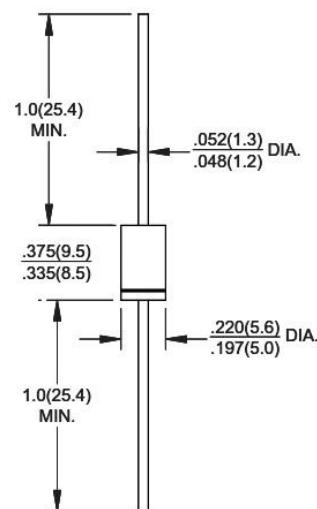


**Kingtronics®****6A05 THRU 6A10****General Purpose Plastic Rectifier****REVERSE VOLTAGE** 50 to 1000 Volts    **FORWARD CURRENT** 6.0 Ampere**FEATURES**

- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering guaranteed
- 260°C/10 seconds, 0.375 " (9.5mm) lead length at 5 lbs(2.3kg) tension

**MECHANICAL DATA**

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any

**DO-201AD(DO-27)****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%

**Dimensions in inches and (millimeters)**

|                                                                                                         |                        | SYMBOL                            | 6A05        | 6A1 | 6A2 | 6A4 | 6A6 | 6A8 | 6A10 | UNIT  |
|---------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------|-------------|-----|-----|-----|-----|-----|------|-------|
| Maximum Repetitive Peak Reverse Voltage                                                                 |                        | V <sub>RRM</sub>                  | 50          | 100 | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum RMS Voltage                                                                                     |                        | V <sub>RMS</sub>                  | 35          | 70  | 140 | 280 | 420 | 560 | 700  | VOLTS |
| Maximum DC Blocking Voltage                                                                             |                        | V <sub>DC</sub>                   | 50          | 100 | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum Average Forward Rectified Current(FIG.1)<br>0.375 " (9.5mm) lead length at T <sub>A</sub> =60°C |                        | I <sub>(AV)</sub>                 | 6.0         |     |     |     |     |     |      | Amps  |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave<br>Superimposed on Rated Load (JEDEC method )  |                        | I <sub>FSM</sub>                  | 150         |     |     |     |     |     |      | Amps  |
| Maximum Instantaneous Forward Voltage at 6.0A                                                           |                        | V <sub>F</sub>                    | 1.1         |     |     |     |     |     |      | Volts |
| Maximum DC Reverse Current at Rated<br>DC Blocking voltage                                              | T <sub>A</sub> = 25°C  | I <sub>R</sub>                    | 10          |     |     |     |     |     |      | uA    |
|                                                                                                         | T <sub>A</sub> = 100°C |                                   | 100         |     |     |     |     |     |      |       |
| Typical Junction Capacitance (NOTE 1)                                                                   |                        | C <sub>J</sub>                    | 150         |     |     |     |     |     |      | pF    |
| Typical Thermal Resistance (NOTE 2)                                                                     |                        | R <sub>θJA</sub>                  | 10          |     |     |     |     |     |      | °C/W  |
| Operating and Storage Temperature Range                                                                 |                        | T <sub>J</sub> , T <sub>STG</sub> | -55 to +150 |     |     |     |     |     |      | °C    |

1- Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.

2-Thermal Resistance from Junction to Ambient at. 375 " (9.5mm) lead length, P.C. board mounted.

**Kingtronics® International Company**Website: [www.kingtronics.com](http://www.kingtronics.com)Email: [info@kingtronics.com](mailto:info@kingtronics.com)

Tel: (852) 8106 7033

Fax: (852) 8106 7099

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## 6A05 THRU 6A10

### RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

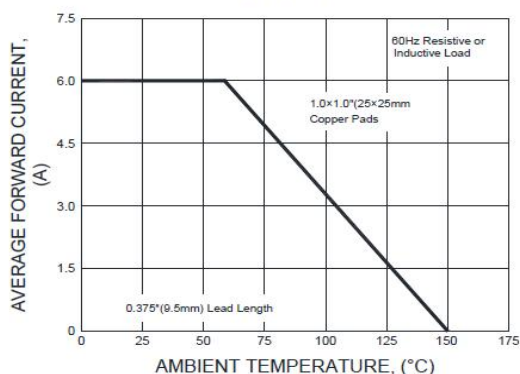


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

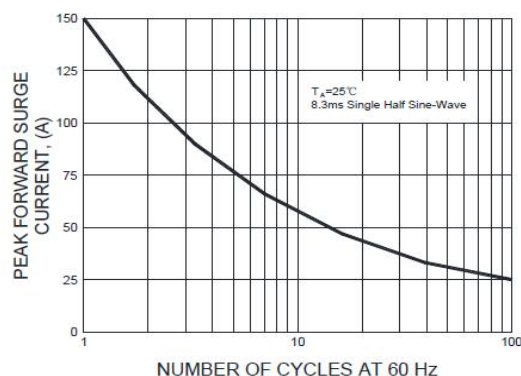


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

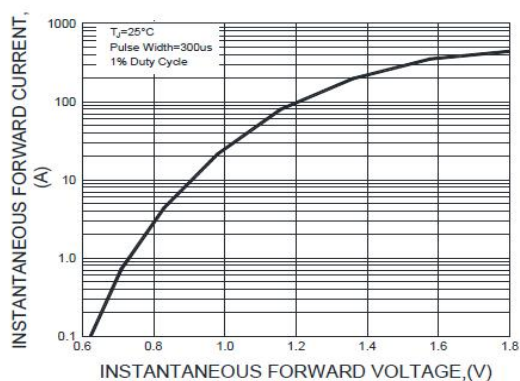


FIG.4-TYPICAL REVERSE CHARACTERISTICS

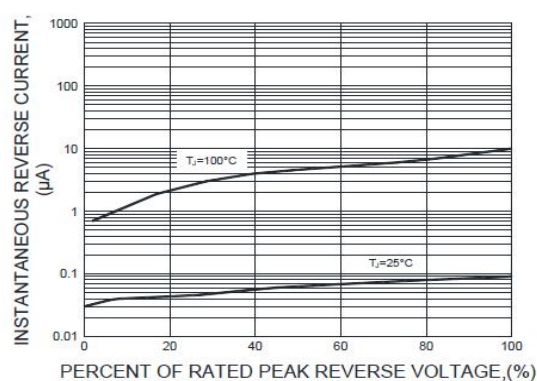
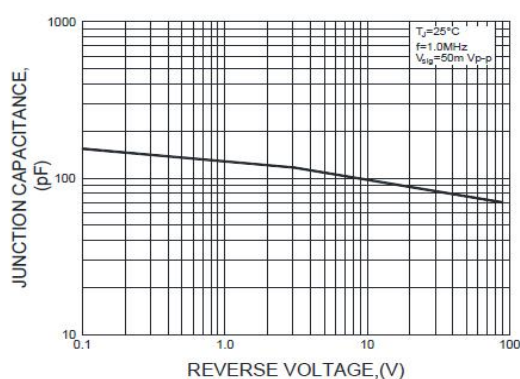


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice.

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