

## 6A05G THRU 6A100G

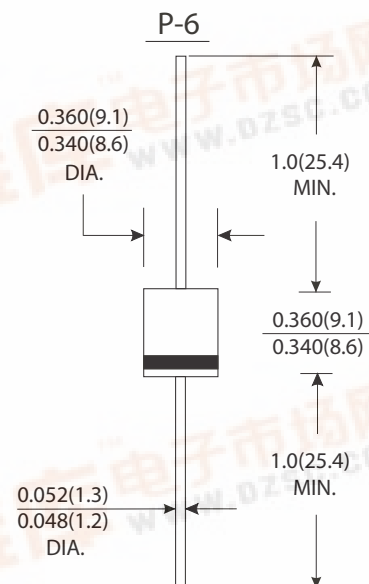
CURRENT 6.0 Amperes  
VOLTAGE 50 to 1000 Volts

### Features

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- High current capability
- Low reverse leakage
- Glass passivated junction
- Low forward voltage drop
- High temperature soldering guaranteed : 350 °C/10 seconds, 0.375"(9.5mm) lead length, 5 lbs, (2.3kg) tension

### Mechanical Data

- Case : P-6 molded plastic body
- Terminals : Lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.007 ounce, 2.1 gram



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

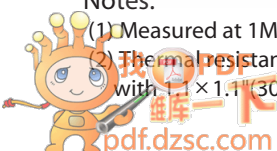
(Ratings at 25 °C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

		Symbols	6A05G	6A10G	6A20G	6A40G	6A60G	6A80G	6A100G	Units
Maximum recurrent 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 0.375"(9.5mm) lead length (see Fig.1)		I <sub>(AV)</sub>	6.0							Amps
Peak forward surge current 8.3ms half sine wave superimposed on rated load (JEDEC method)		I <sub>FSM</sub>	400.0							Amps
Maximum instantaneous forward voltage at 6.0A		V <sub>F</sub>	1.1							Volts
Maximum reverse current at rated DC blocking voltage	T <sub>A</sub> =25 °C	I <sub>R</sub>	10.0							μA
	T <sub>A</sub> =100 °C		100.0							
Typical thermal resistance (Note 2)		R <sub>θJA</sub>	20.0							°C/W
		R <sub>θJL</sub>	4.0							
Typical junction capacitance (Note 1)		C <sub>J</sub>	150							pF
Operating and storage temperature range		T <sub>J</sub> T <sub>STG</sub>	-50 to +175							°C

#### Notes:

(1) Measured at 1MHz and applied reverse voltage of 4.0V DC.

(2) Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm) lead length, P.C.B. mounted with 1.1" × 1.1" (30 × 30mm) copper pads.



## RATINGS AND CHARACTERISTIC CURVES 6A05G-6A100G

FIG.1-FORWARD CURRENT DERATING CURVE

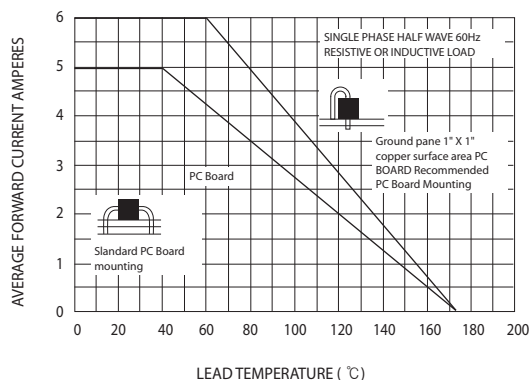


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

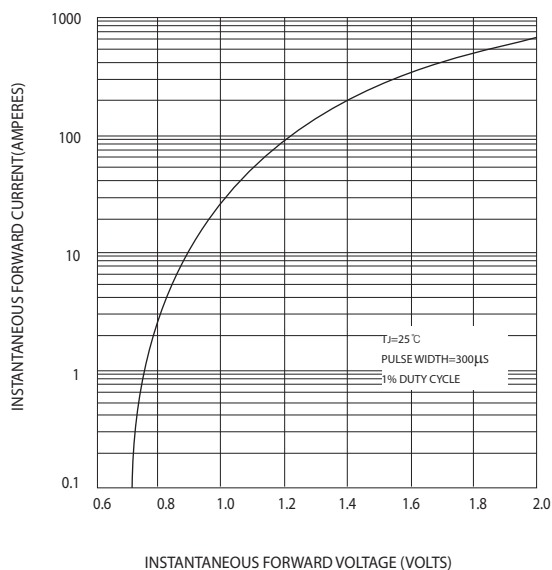


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

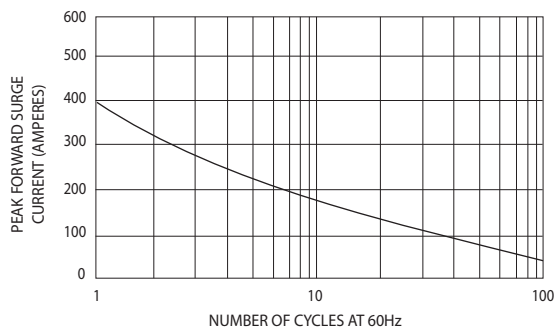


FIG.4-TYPICAL REVERSE CHARACTERISTICS

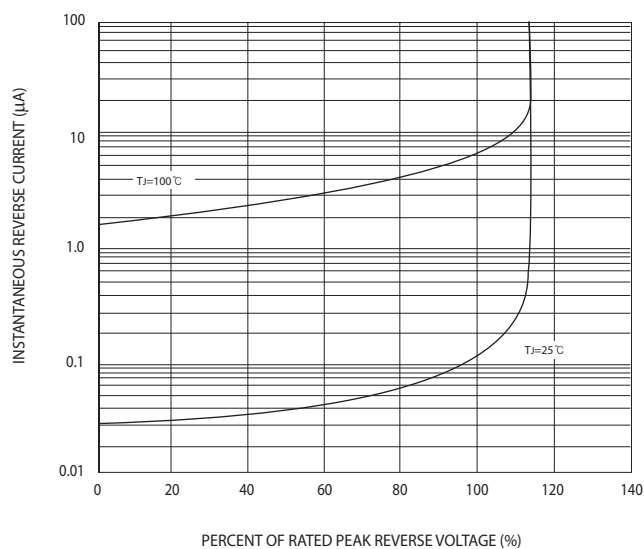


FIG.5-TYPICAL THERMAL RESISTANCE VS LEAD LENGTH

