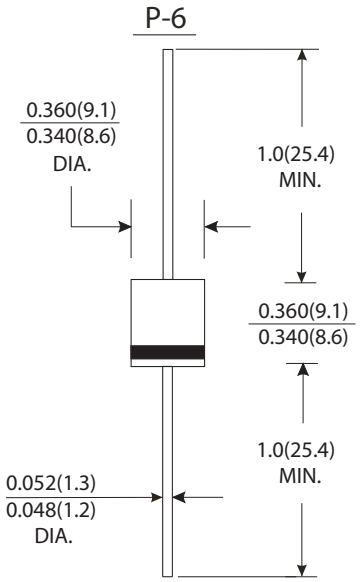
DEC

6A05 THRU 6A100

CURRENT 6.0 Amperes
VOLTAGE 50 to 1000 Volts

Features

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- High forward current capability
- High surge current capability
- Construction utilizes void-free molded plastic technique
- High temperature soldering guaranteed : 250℃/10 seconds, 0.375"(9.5mm) lead length, 5 lbs, (2.3kg) tension



Dimensions in inches and (millimeters)

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 : 0.07 ounce, 2.1 grams

Maximum Ratings And Electrical Characteristics

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

		Symbols	6A05	6A10	6A20	6A40	6A60	6A80	6A100	Units
Maximum recurrent peak reverse voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS 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 rectified current 0.375"(9.5mm) lead length T_A=60℃		$I_{(AV)}$	6.0							Amps
Peak forward surge current 8.3ms half sine wave superimposed on rated load (JEDEC method)		I_{FSM}	400.0							Amps
Maximum instantaneous forward voltage at 6.0A		V_F	1.1							Volts
Maximum reverse current at rated voltage	T_A=25℃	I_R	10.0							μA
	T_A=100℃		100.0							
Typical thermal resistance (Note 2)		$R\theta_{JA}$ $R\theta_{JL}$	20.0 4.0							℃/W
Typical junction capacitance (Note 1)		C_J	150							pF
Operating and storage temperature range		T_J T_{STG}	-50 to +175							℃

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 6A05 THRU 6A100

FIG.1-FORWARD CURRENT DERATING CURVE

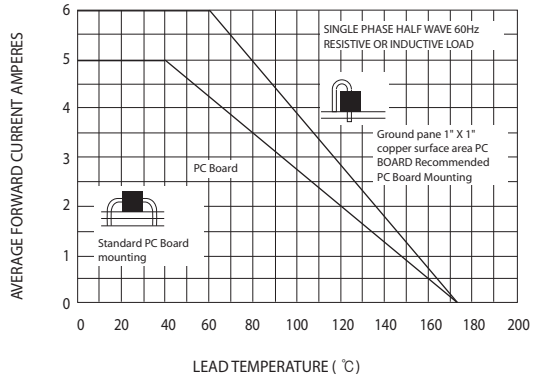


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

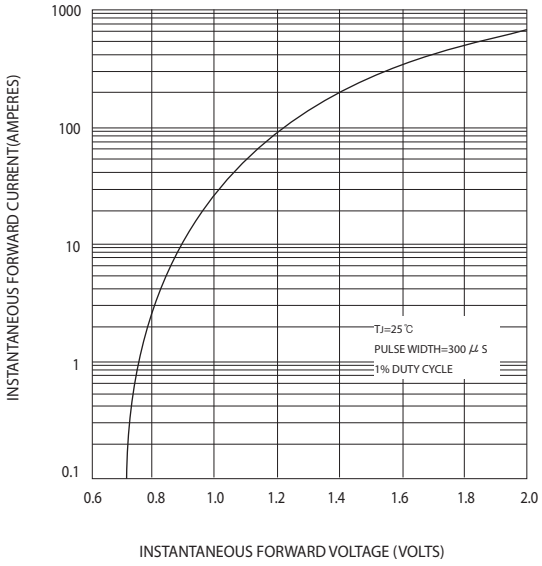


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

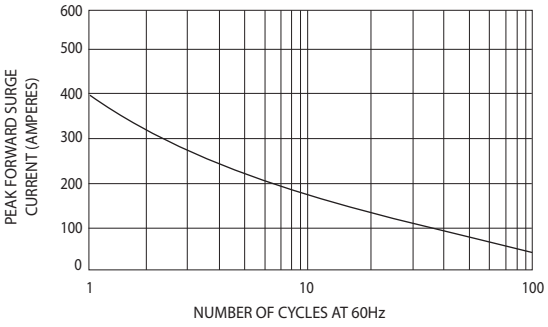


FIG.4-TYPICAL REVERSE CHARACTERISTICS

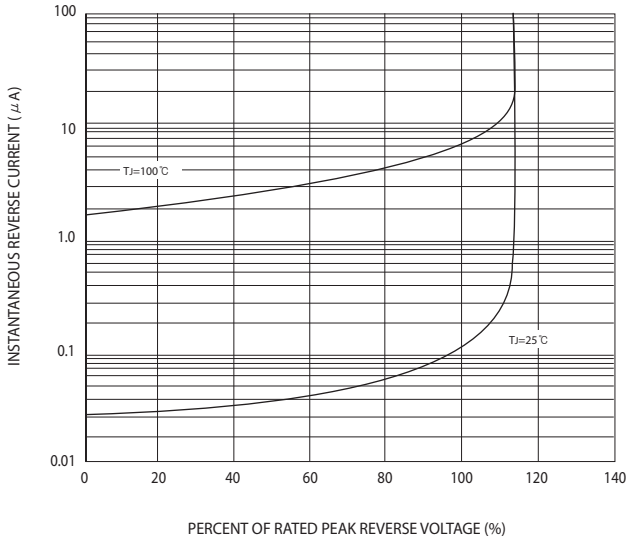


FIG.5-TYPICAL THERMAL RESISTANCE VS LEAD LENGTH