DACO SEMICONDUCTOR CO., LTD.

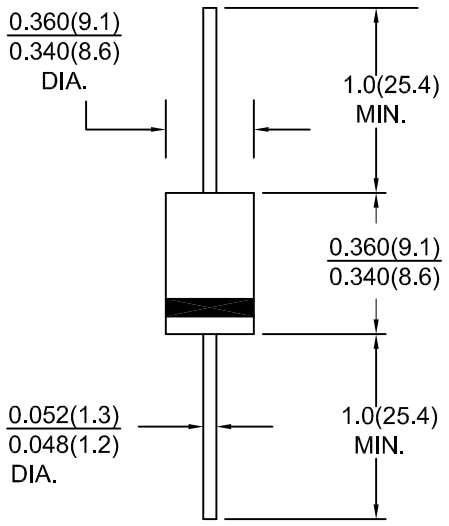
6A05 THRU 6A10

SILICON RECTIFIERS

FEATURES:

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

R-6



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case : Molded plastic
Epoxy : UL 94V-0 rate flame retardant
Lead : Axial leads, solderable per MIL-STD-202,
Method 208 guaranteed
Polarity : Color band on body denotes cathode end
Mounting Position : Any
Weight : 1.65 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temp. unless otherwise specified.
Single phase, half sine wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20 %.

Characteristic	Symbol	6A05	6A1	6A2	6A4	6A6	6A8	6A10	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 .375"(9.5mm) lead length at Ta=60℃	I_O	6.0							Amps
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	300							Amps
Maximum instantaneous forward voltage at 6.0 A	V_F	0.95							Volts
Maximum DC reverse current Ta=25℃ / Ta=100℃ at rated DC blocking voltage	I_R	10.0 / 400							μA
Typical junction capacitance (note 1)	C_j	100							pF
Typical thermal resistance R_{th}-JA (note 2)	R_{th}-JA	10							℃/W
Operating junction temperature	T_j	-65 to +125							℃
Storage temperature range	T_{stg}	-65 to +150							℃

NOTES: 1. Measured at 1MHz and applied reverse voltage of 4.0V DC
2. Thermal resistance from junction to ambient .375"(9.5mm) lead length

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

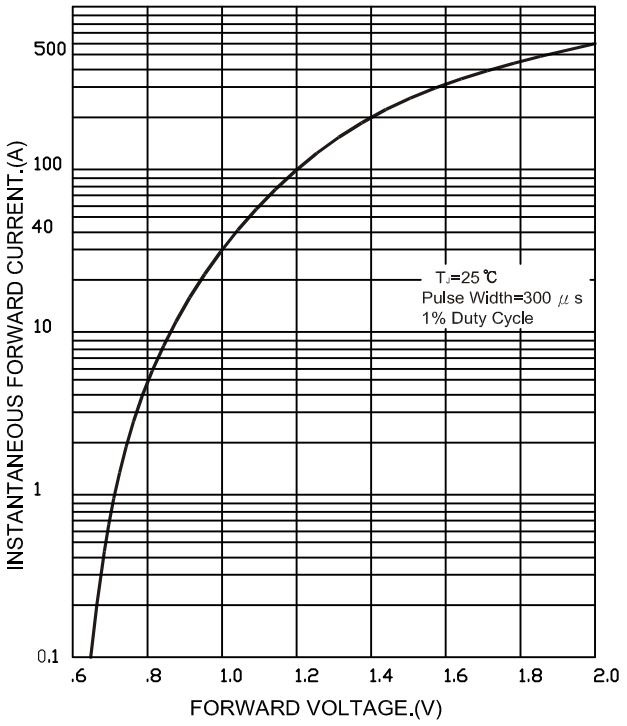


FIG.2 - TYPICAL FORWARD CURRENT DERATING CURVE

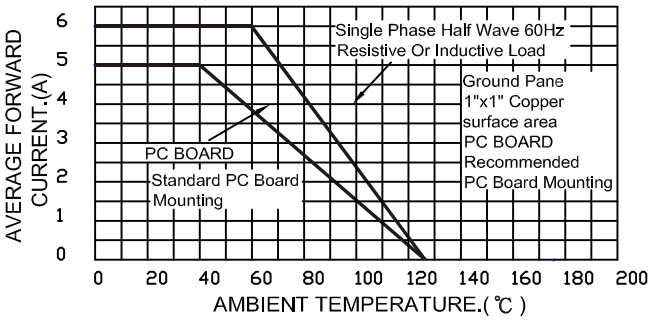


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

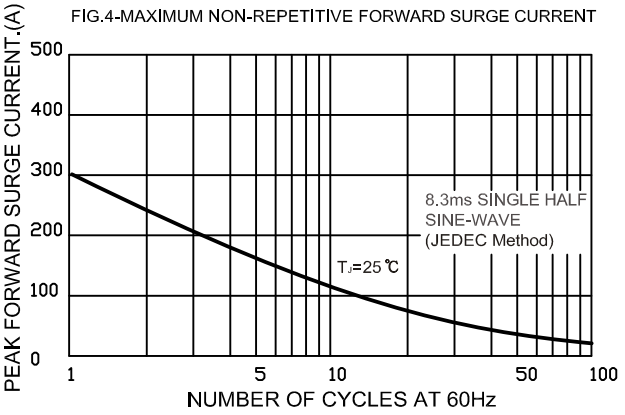


FIG.3-TYPICAL REVERSE CHARACTERISTICS

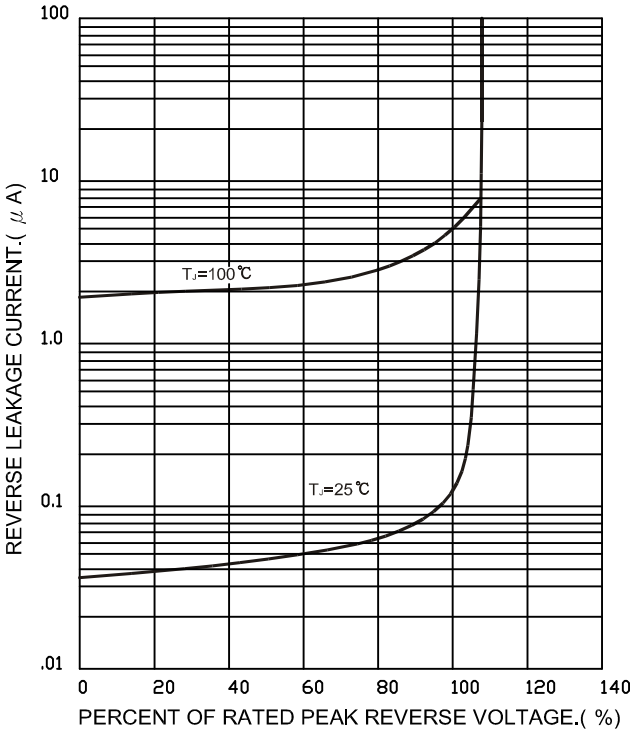
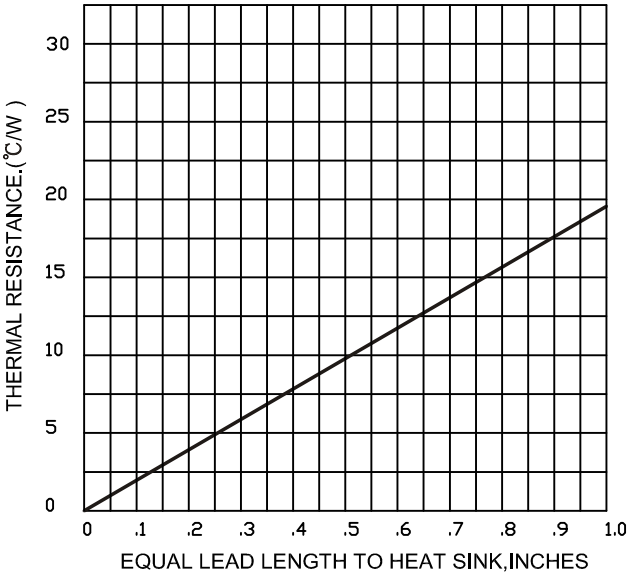


FIG.5 - TYPICAL THERMAL RESISTANCE VS. LEAD LENGTH



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