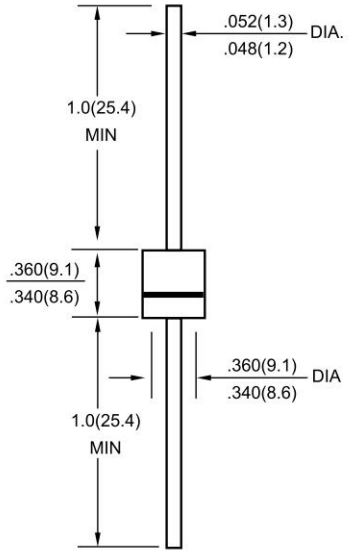
General Purpose Rectifier

Parameter	Value	Unit
V_{RRM}	50~1000	V
$I_{F(AV)}$	6.0	A

Features

- High efficiency, Low VF
- High current capability
- High reliability
- High surge current capability
- Low power loss

R-6



Dimensions in inches and (millimeters)

Electrical Characteristics(at TJ = 25℃ unless otherwise specified)

Parameter	Symbol	6A05	6A1	6A2	6A4	6A6	6A8	6A10	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 0.375"(9.5mm) lead length at TA=60℃	$I_{F(AV)}$	6.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	400							A
Maximum instantaneous forward voltage at 6.0A	V_F	0.95							V
Maximum DC reverse current at rated DC blocking voltage TA=25℃ / TA=100℃	I_R	10.0 / 400							μA
Typical junction capacitance (NOTE 1)	C_J	150							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	10.0							℃/W
Operating junction and storage temperature range	T_J,T_{STG}	-65 to +175							℃

Note:
1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.Thermal resistance from junction to ambient at 0.375" (9.5mm)lead length,P.C.B. mounted

Typical characteristics

FIG. 1- FORWARD CURRENT DERATING CURVE

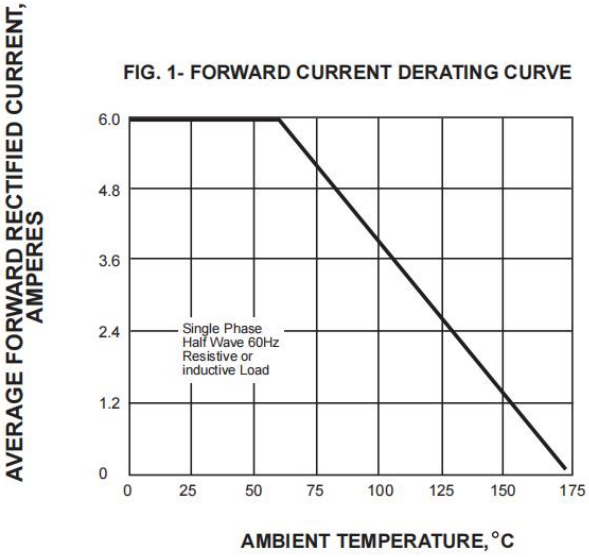


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

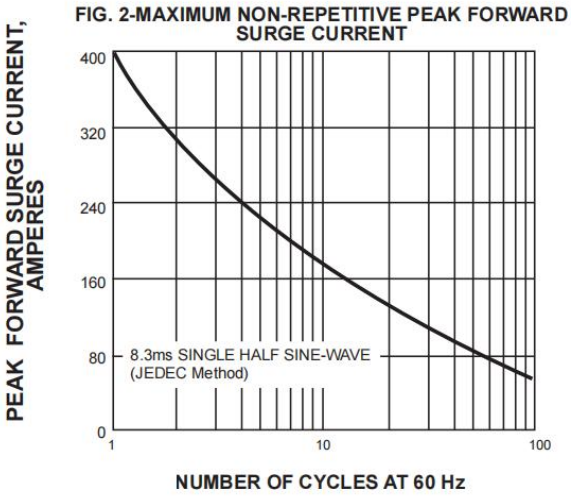


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

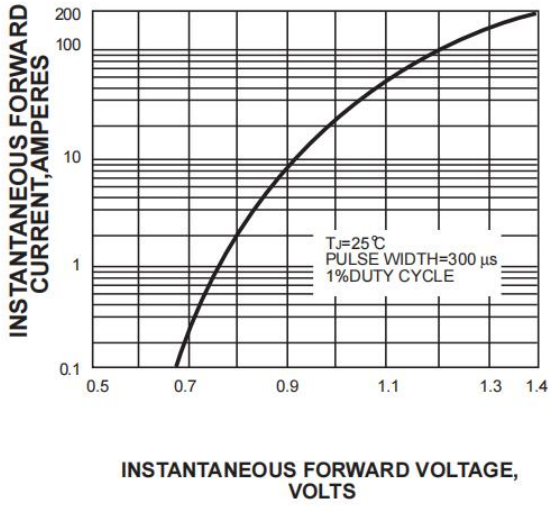


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

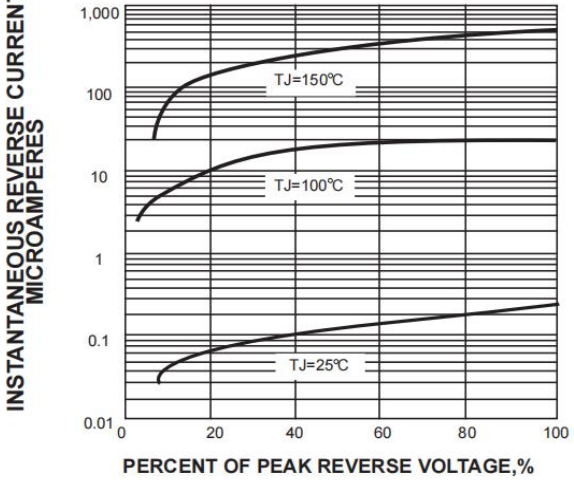


FIG. 5-TYPICAL JUNCTION CAPACITANCE

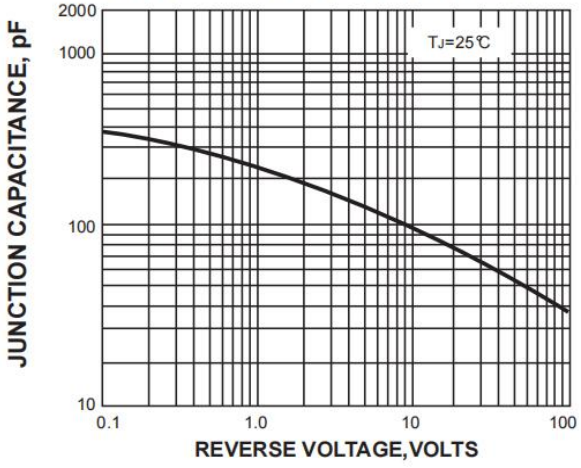
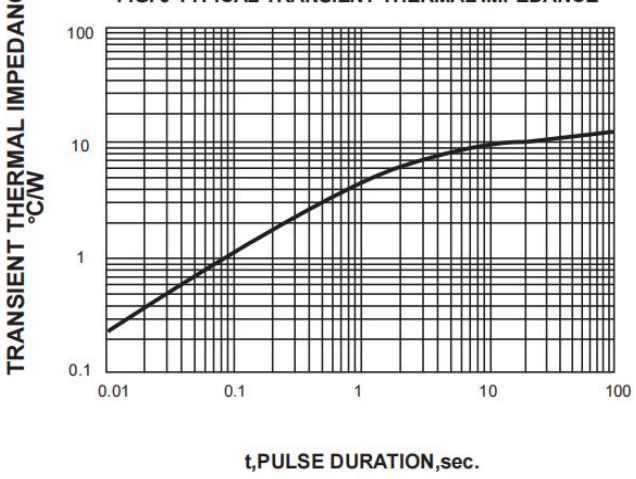


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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