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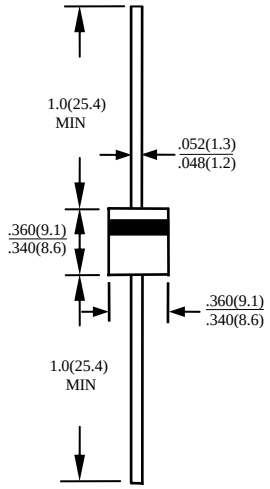
6A GENERAL PURPOSE PLASTIC RECTIFIER

GP60-005-LFR THRU GP60-10-LFR

FEATURES

- HIGH CURRENT LEAD MOUNTED
- DIFFUSED JUNCTION
- HIGH SURGE CAPABILITY
- LOW FORWARD VOLTAGE DROP
- COMPLETELY INSULATED CASE
- UNIFORM MOLDED BODY
- THE PLASTIC MATERIAL CARRIES U/L RECOGNITION 94V-0
- HIGH TEMPERATURE SOLDERING GUARANTEED: 260°C/10S /0.375" , (9.5mm) LEAD LENGTH/5 LBS. (2.3KG) TENSION
- ROHS



MECHANICAL DATA

- CASE: MOLDED PLASTIC, P6, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINAL: AXIAL LEADS, SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY: COLOR BAND DENOTES CATHODE
- MOUNTING POSITION: ANY
- WEIGHT : 2.1 GRAMS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

RATINGS	SYMBOL	GP60-005 -LFR	GP60-01 -LFR	GP60-02 -LFR	GP60-04 -LFR	GP60-06 -LFR	GP60-08 -LFR	GP60-10 -LFR	UNITS
MAXIMUM RECURRENT 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=55°C	I_O	6.0							A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	400							A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	150							PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta ja}$	10							℃/W
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 175							℃
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 175							℃

ELECTRICAL CHARACTERISTICS (A_T T_A =25°C UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	GP60-005 -LFR	GP60-01 -LFR	GP60-02 -LFR	GP60-04 -LFR	GP60-06 -LFR	GP60-08 -LFR	GP60-10 -LFR	UNITS
MAXIMUM FORWARD VOLTAGE AT I_O DC	V_F	1.0							V
MAXIMUM REVERSE CURRENT AT 25℃	I_R	5							μA
MAXIMUM REVERSE CURRENT AT100℃	I_R	50							μA

NOTE: 1. MEASURED AT 1MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. BOTH LEADS ATTACHED TO HEAT SINK 70×70×1t(mm) COPPER PLATE AT LEAD LENGTH 5mm

RATINGS AND CHARACTERISTIC CURVE GP60-005-LFR THRU GP60-10-LFR

FIG.1-MAXIMUM FORWARD CURRENT DERATING CURRENT

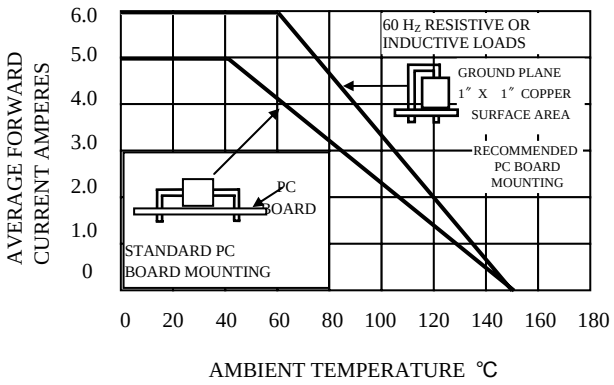


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

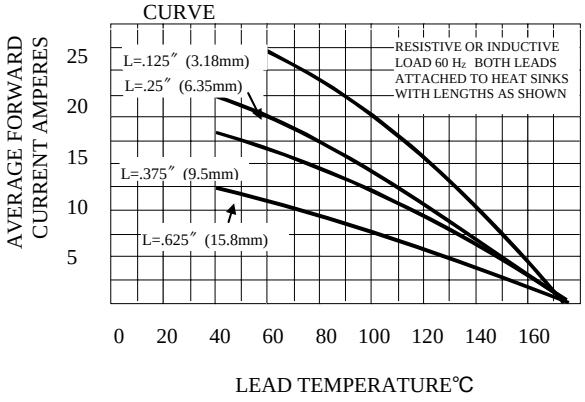


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

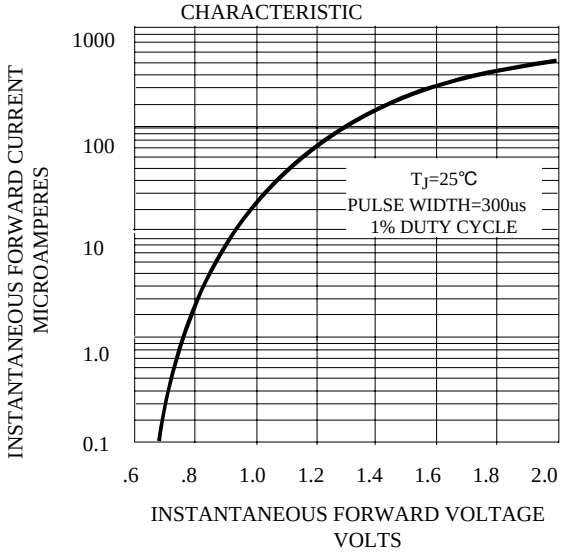


FIG.4-TYPICAL REVERSE CHARACTERISTICS

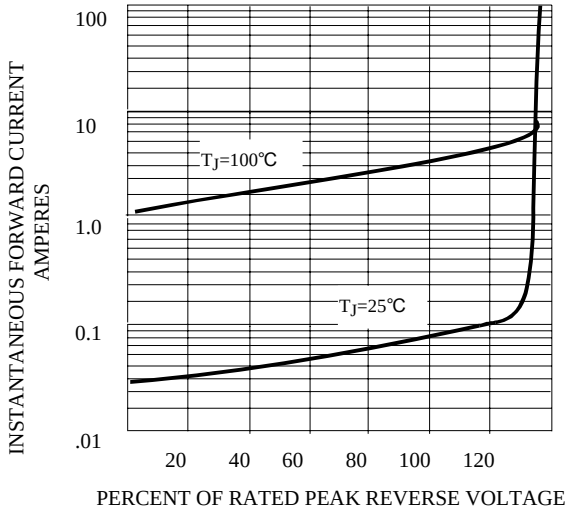


FIG.5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

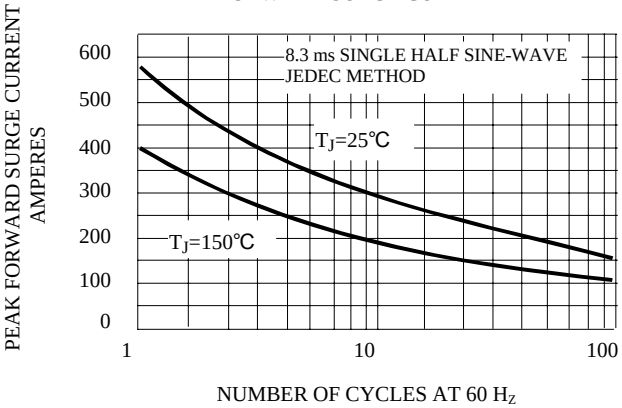


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE