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6A GENERAL PURPOSE PLASTIC RECTIFIER

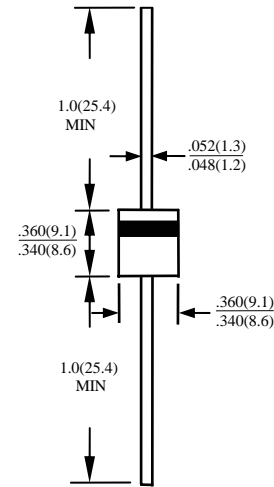
GP60-005R-LFR THRU GP60-10R-LFR

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
- BEVEL ROUND CHIP, AVALANCHE OPERATION
- 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	GP60-005R	GP60-01R	GP60-02R	GP60-04R	GP60-06R	GP60-08R	GP60-10R	UNITS	
		-LFR	-LFR	-LFR	-LFR	-LFR	-LFR	-LFR		
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 $T_A=55^\circ\text{C}$	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								°C/W
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 175								°C
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 175								°C

ELECTRICAL CHARACTERISTICS ($A_T T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	GP60-005R	GP60-01R	GP60-02R	GP60-04R	GP60-06R	GP60-08R	GP60-10R	UNITS	
		-LFR	-LFR	-LFR	-LFR	-LFR	-LFR	-LFR		
MAXIMUM FORWARD VOLTAGE AT I_O DC	V_F	1.0								V
MAXIMUM REVERSE CURRENT AT 25°C	I_R	5								μA
MAXIMUM REVERSE CURRENT AT 100°C	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 GP60-005R-LFR THRU GP60-10R-LFR

FIG.1-MAXIMUM FORWARD CURRENT DERATING CURRENT

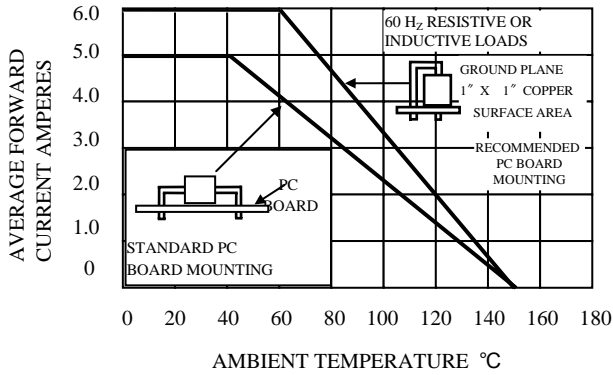


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

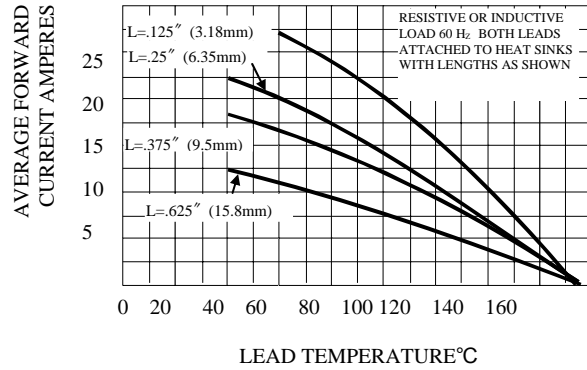


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

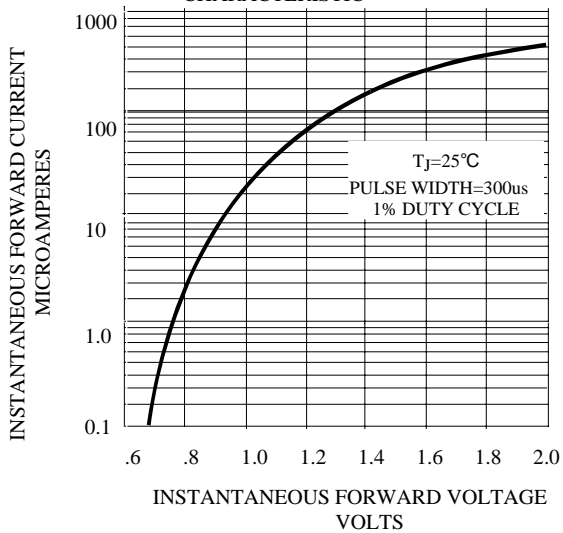


FIG.4-TYPICAL REVERSE CHARACTERISTICS

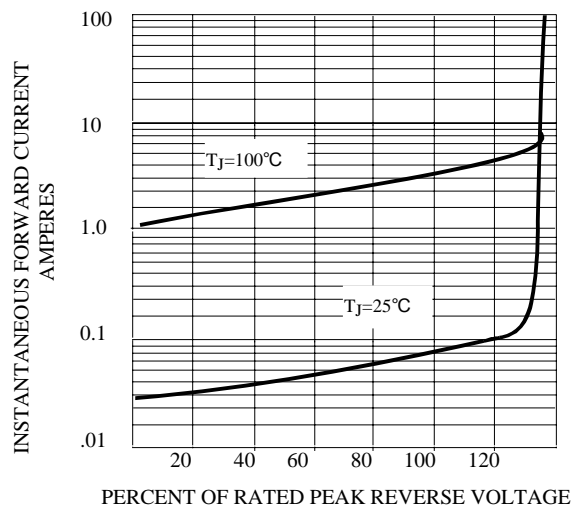


FIG.5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

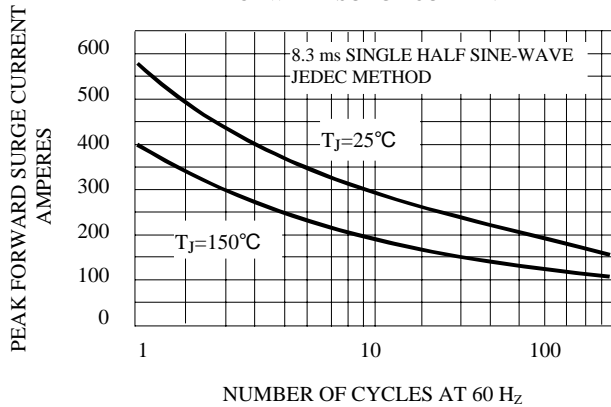


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

