



FRONTIER
ELECTRONICS CO., LTD.

GP60-005G
THRU
GP60-10G

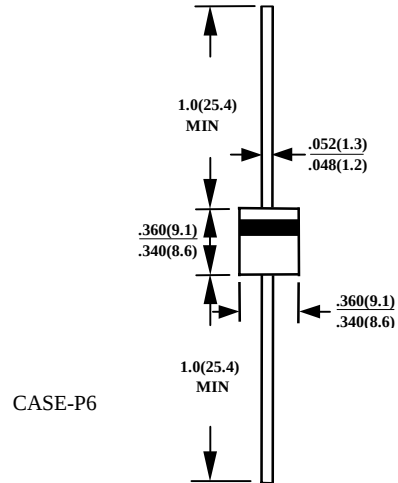
6A GENERAL PURPOSE GLASS PASSIVATED RECTIFIER

FEATURES

- HIGH CURRENT LEAD MOUNTED
- GLASS PASSIVATED CHIP 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
/.375" , (9.5mm) LEAD LENGTH/5 LBS. (2.3KG) TENSION

MECHANICAL DATA

- CASE : MOLDED PLASTIC
- TERMINAL : AXIAL LEADS, SOLDERABLE PER MIL-STD-202,
METHOD 208
- POLARITY : COLOR BAND DENOTES CATHODE
- MOUNTING POSITION : ANY
- WEIGHT : 2.1 GRAMS



DIMENSIONS IN INCHES AND (MILLIMETERS)

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	GP60-005G	GP60-01G	GP60-02G	GP60-04G	GP60-06G	GP60-08G	GP60-10G	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 SEE FIG.1	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 (NOTE1)	C_J	150							PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta ja}$	20							°C/W
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JL}$	4							°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°C UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	GP60-005G	GP60-01G	GP60-02G	GP60-04G	GP60-06G	GP60-08G	GP60-10G	UNITS
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. THERMAL RESISTANCE FROM JUNCTION TO AMBIENT AND FROM JUNCTION TO LEAD AT 9.5mm LEAD LENGTH
P.C.B. MOUNTED WITH 30x 30 COPPER PADS

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

FIG.1-MAXIMUM FORWARD CURRENT DERATING CURRENT

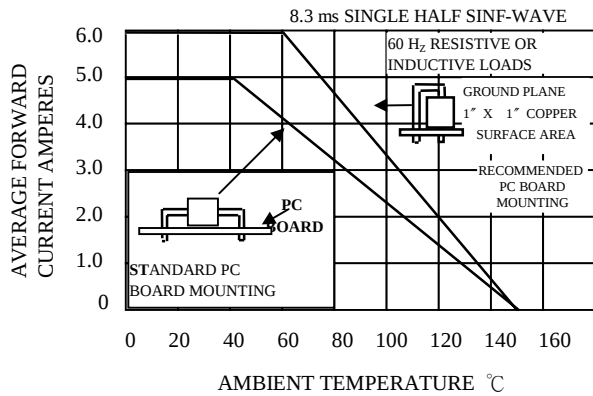


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

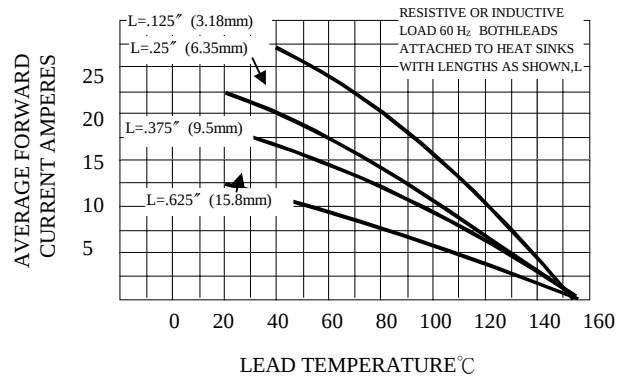


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

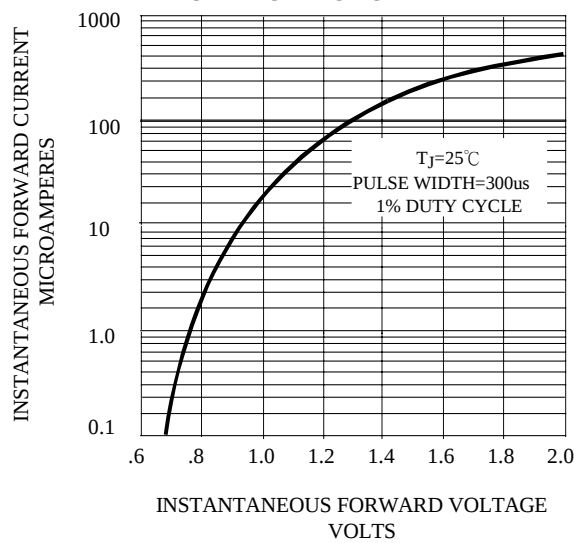


FIG.4-TYPICAL REVERSE CHARACTERISTICS

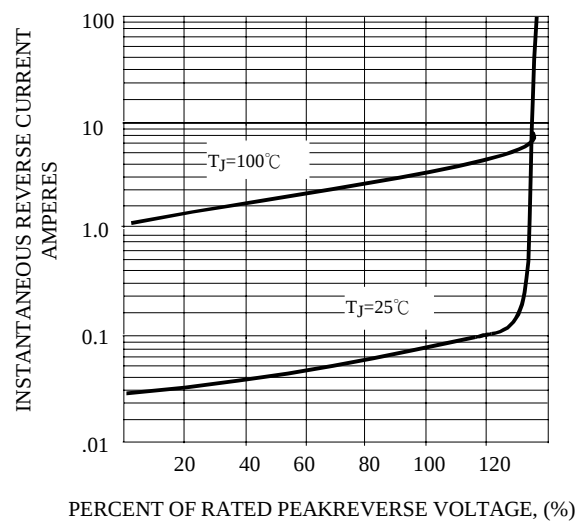


FIG.5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

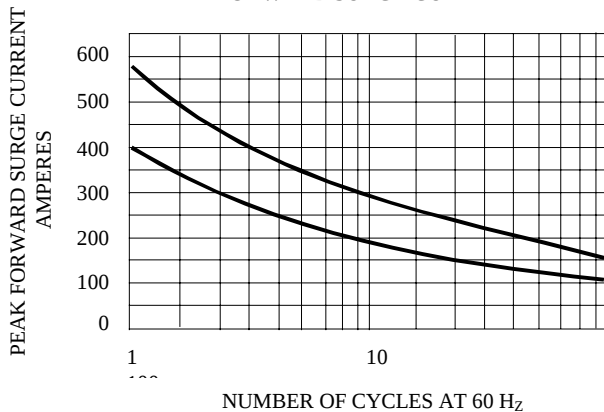


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

