



FRONTIER
ELECTRONICS CO., LTD.

GP80-005
THRU
GP80-10

8A GENERAL PURPOSE PLASTIC RECTIFIER

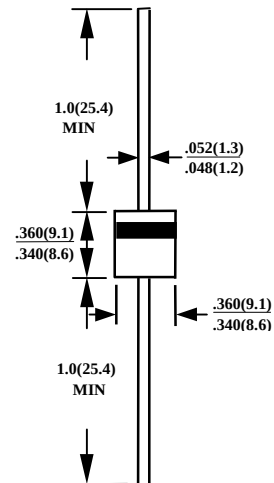
FEATURES

- 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 : 250°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

CASE-P6



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	GP80-005	GP80-01	GP80-02	GP80-04	GP80-06	GP80-08	GP80-10	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 .375" (9.5mm) LEAD LENGTH AT $T_A=55^{\circ}C$	I_O	8.0							A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	400							A
TYPICAL JUNCTION CAPACITANCE (NOTE)	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 ($A_T T_A = 25^{\circ}C$ UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	GP80-005	GP80-01	GP80-02	GP80-04	GP80-06	GP80-08	GP80-10	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. BOTH LEADS ATTACHED TO HEATSINK 100× 100× 1t(mm) COPPER PLATE AT LEAD LENGTH 5mm

RATINGS AND CHARACTERISTIC CURVES GP80-005 THRU GP80-10

FIG. 1 - FORWARD DERATING CURVE

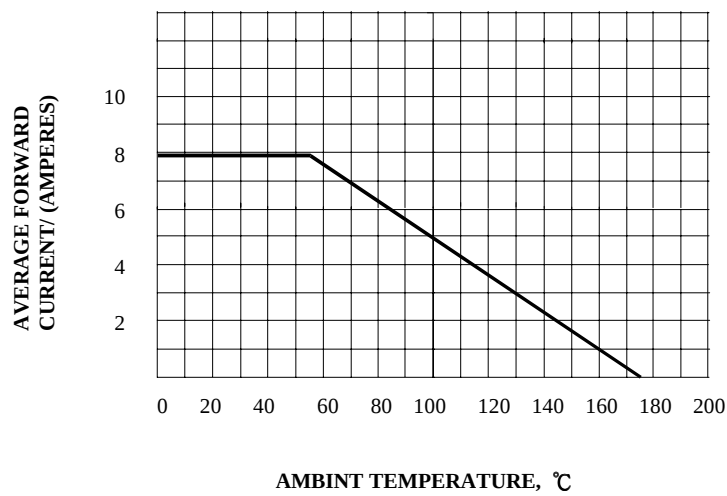


FIG. 2 - TYPICAL FORWARD CHARACTERISTIC

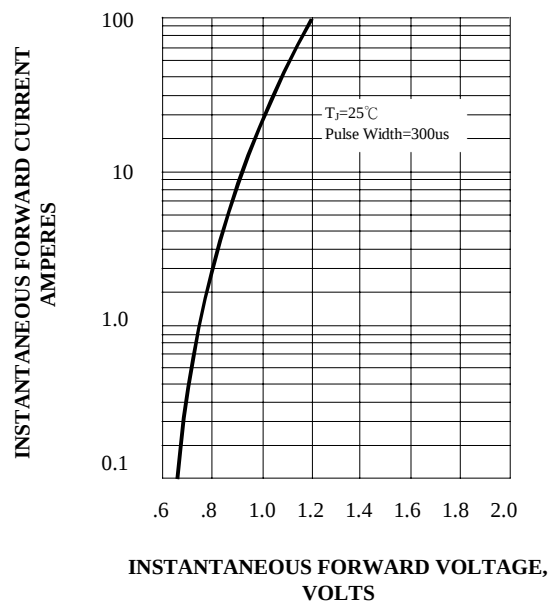


FIG. 3 - PEAK FORWARD SURGE CURRENT

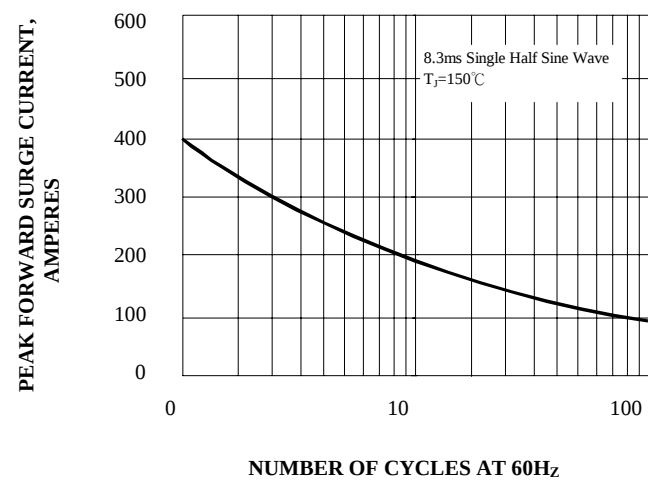


FIG. 4 - TYPICAL REVERSE CHARACTERISITIC

