



FRONTIER
ELECTRONICS CO., LTD.

GP20-005R
THRU
GP20-10R

2A GENERAL PURPOSE PLASTIC RECTIFIER

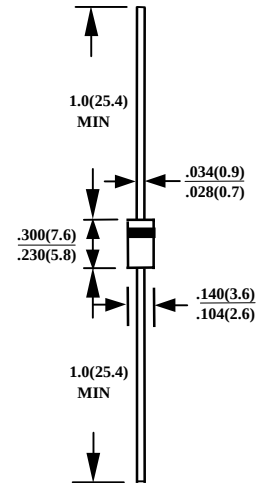
FEATURES

- LOW FORWARD VOLTAGE
- HIGH CURRENT CAPABILITY
- LOW LEAKAGE CURRENT
- HIGH SURGE CAPABILITY
- BEVEL ROUND CHIP, AVALANCHE OPERATION

MECHANICAL DATA

- CASE : MOLDED PLASTIC USE UL 94V-0 RECOGNIZED
FLAME RETARDANT EPOXY
- TERMINAL : AXIAL LEADS, SOLDERABLE PER MIL-STD-202
METHOD 208
- POLARITY : COLOR BAND DENOTES CATHODE
- MOUNTING POSITION : ANY
- WEIGHT : 0.4 GRAMS

CASE-DO15



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	GP20-005R	GP20-01R	GP20-02R	GP20-04R	GP20-06R	GP20-08R	GP20-10R	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	2.0							A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	70							A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	20							PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta ja}$	25							$^{\circ}C/W$
OPERATING TEMPERATURE RANGE	T_{OP}	-55 TO + 175							$^{\circ}C$

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

CHARACTERISTICS	SYMBOL	GP20-005R	GP20-01R	GP20-02R	GP20-04R	GP20-06R	GP20-08R	GP20-10R	UNITS
MAXIMUM FORWARD VOLTAGE AT I_O DC	V_F	1.1							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 35×35×1t(mm) COPPER PLATE AT LEAD LENGTH 5mm

RATINGS AND CHARACTERISTIC CURVE GP20-005R THRU GP20-10R

FIG. 1- FORWARD CURRENT DERATING CURVE

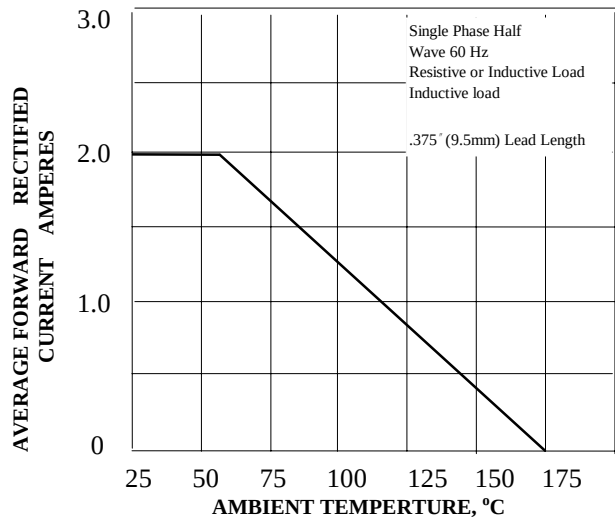


FIG. 2 -TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

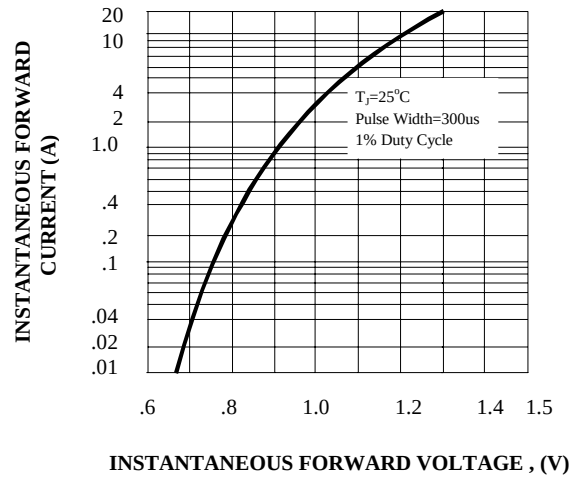


FIG. 3 -PEAK FORWARD SURGE CURRENT

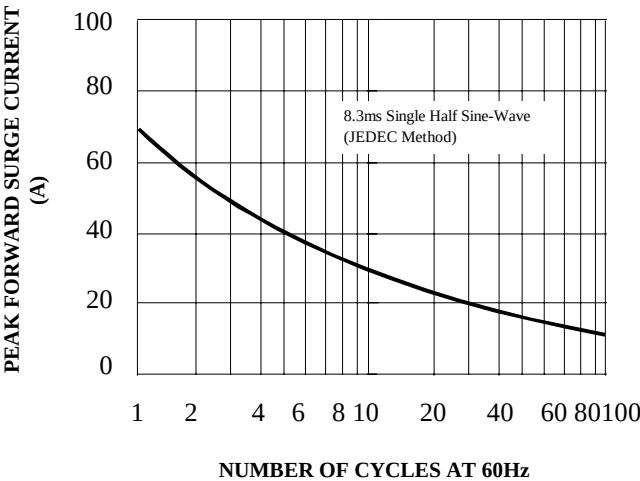


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

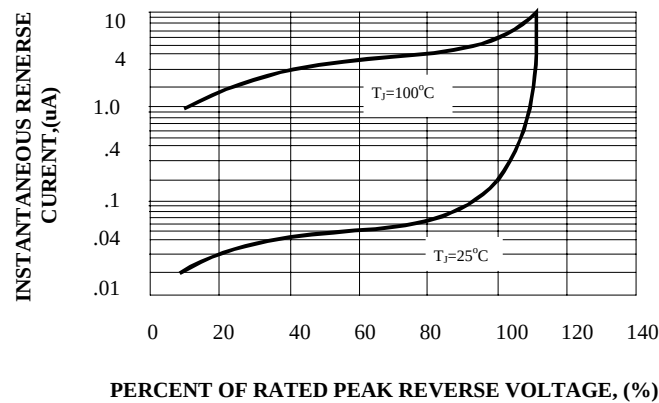


FIG. 5 -TYPICAL JUNCTION CAPACITANCE

