



FRONTIER
ELECTRONICS CO., LTD.

GP30-005R THRU GP30-10R

3A GENERAL PURPOSE PLASTIC RECTIFIER

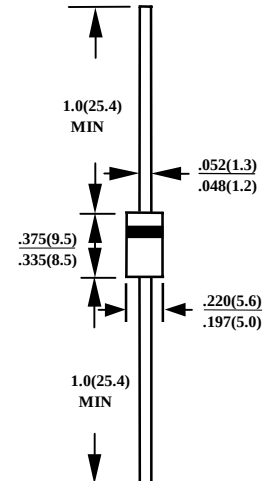
FEATURES

- LOW COST
- UL 94V0 FLAME RETARDANT EPOXY MOLDING COMPOUND
- DIFFUSED JUNCTION
- HIGH SURGE CURRENT CAPABILITY
- BEVEL ROUND CHIP, AVALANCHE OPERATION

MECHANICAL DATA

- CASE : TRANSFER MOLDED
- LEADS : SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY : CATHODE INDICATED BY COLOR BAND
- WEIGHT : 1.2 GRAMS

CASE-DO201AD



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	GP30-005R	GP30-01R	GP30-02R	GP30-04R	GP30-06R	GP30-08R	GP30-10R	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	3.0							A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	200							A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	30							PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta ja}$	20							$^{\circ}C/W$
OPERATING TEMPERATURE RANGE	T_{OP}	-55 TO + 175							$^{\circ}C$

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

CHARACTERISTICS	SYMBOL	GP30-005R	GP30-01R	GP30-02R	GP30-04R	GP30-06R	GP30-08R	GP30-10R	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 63.5×63.5×1t(mm) COPPER PLATE AT LEAD LENGTH 5mm

RATINGS AND CHARACTERISTIC CURVE GP30-005R THRU GP30-10R

Fig. 1-MAXIMUM CURRENT RATING
EFFECT OF COPPER AREA.
RESISTIVE/INDUCTIVE LOAD.

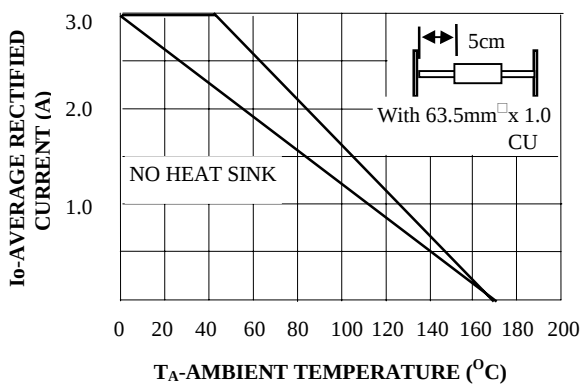


Fig. 2-MAXIMUM FORWARD SURGE
NUMBER OF CYCLES

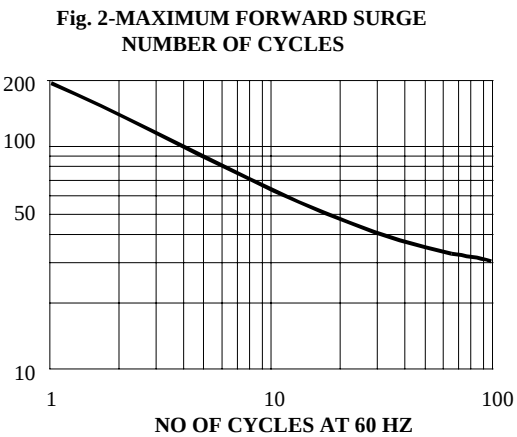


Fig. 3-MAXIMUM CURRENT RATING
EFFECT OF COPPER AREA.
RESISTIVE/INDUCTIVE LOAD.

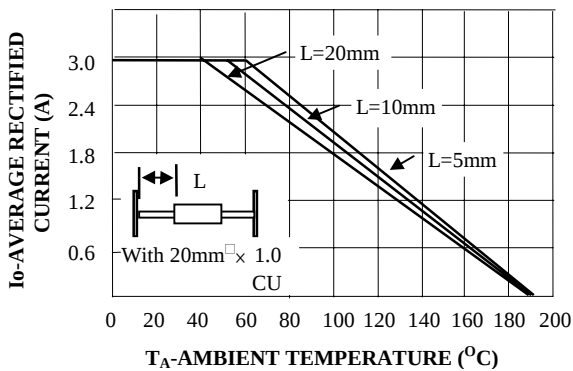


Fig. 4-TYPICAL JUNCTION CAPACITANCE

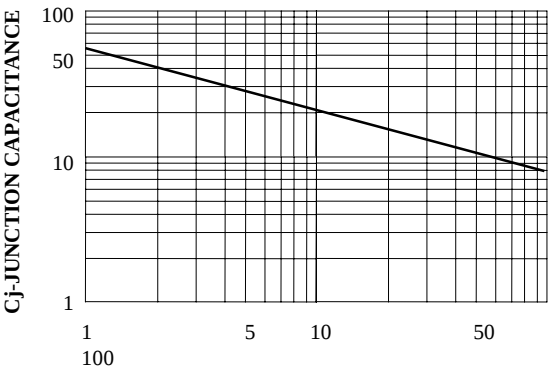


Fig. 5-TYPICAL FORWARD CHARACTERISTICS

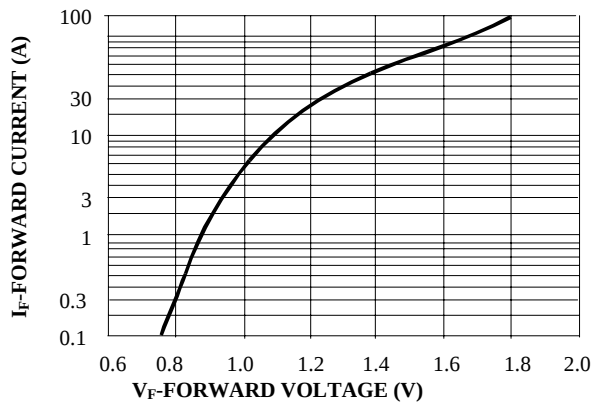


Fig. 6-FORWARD PULSE CURRENT,PULSE

