



**FRONTIER
ELECTRONICS CO., LTD.**

**GP30-005G
THRU
GP30-10G**

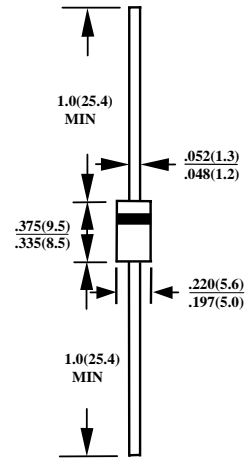
3A GENERAL PURPOSE PLASTIC RECTIFIER

FEATURES

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

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 -005G	GP30 -01G	GP30 -02G	GP30 -04G	GP30 -06G	GP30 -08G	GP30 -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 .375" (9.5mm) LEAD LENGTH AT TA=55°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							°C/W
OPERATING TEMPERATURE RANGE	T_{OP}	-55 TO + 175							°C

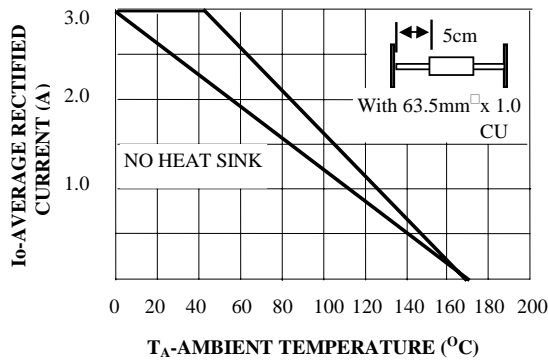
ELECTRICAL CHARACTERISTICS (AT TA =25°C UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	GP30 -005G	GP30 -01G	GP30 -02G	GP30 -04G	GP30 -06G	GP30 -08G	GP30 -10G	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

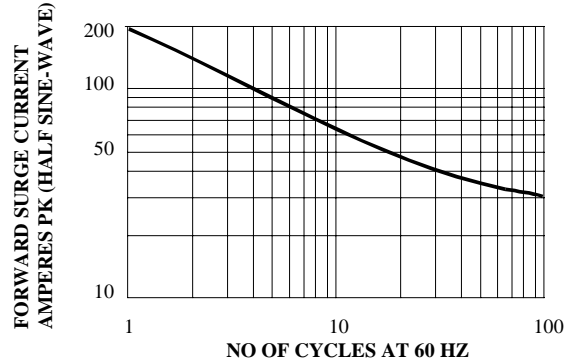
- NOTE : 1. MEASURED AT 1MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. BOTH LEADS ATTACHED TO HEATSINK 63.5×63.5×1t(mm) COPPER PLATE AT LEAD LENTH 5mm

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

**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.**

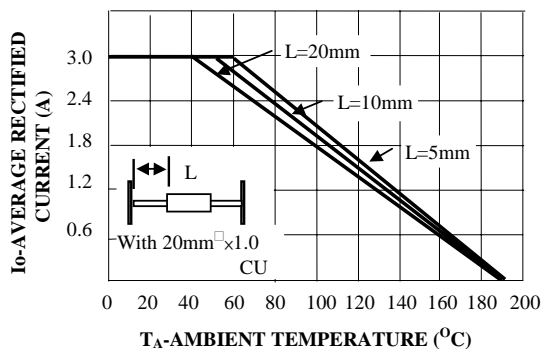


Fig. 4-TYPICAL JUNCTION CAPACITANCE

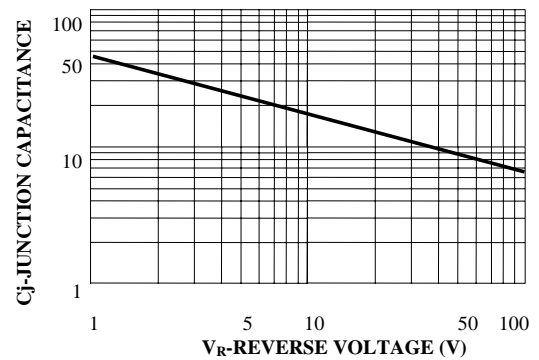


Fig. 5-TYPICAL FORWARD CHARACTERISTICS

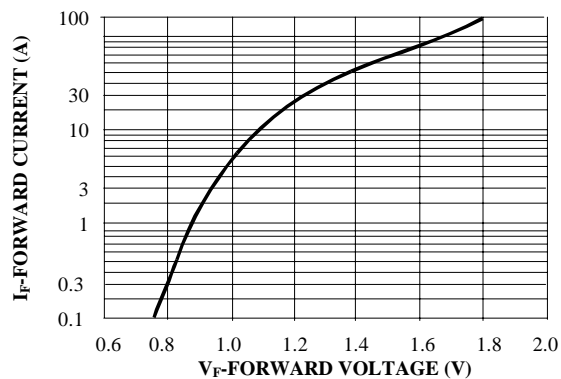


Fig. 6-FORWARD PULSE CURRENT, PULSE

