



HIGH VOLTAGE SILICON RECTIFIER

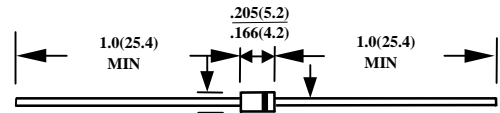
**GP02-25
THRU
GP02-60**

FEATURES

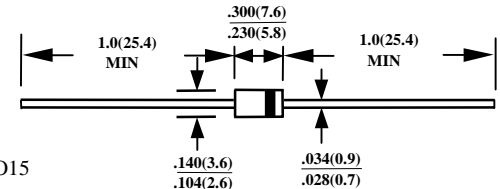
- AVALANCHE OPERATION
- UL 94V0 FLAME RETARDANT EPOXY MOLDING COMPOND
- BEVELED ROUND CHIP
- LOW COST

MECHANICAL DATA

- CASE : TRANSFER MOLDED
- LEADS : SOLDERABLE PER MIL-STD-202,METHOD 208
- POLARITY : CATHODE INDICATED BY COLOR BAND
- WEIGHT : 0.34 GRAMS (DO-41)
0.4 GRAMS (DO-15)



CASE-DO41
(GP02-25~GP02-30)



CASE-DO15
(GP02-35~GP02-60)

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	GP02-25	GP02-30	GP02-35	GP02-40	GP02-50	GP02-60	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	2500	3000	3500	4000	5000	6000	V
MAXIMUM RMS VOLTAGE	V_{RMS}	1750	2100	2450	2800	3500	4200	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	2500	3000	3500	4000	5000	6000	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT .375" (9.5mm) LEAD LENGTH AT TA=55°C	I_O	0.2						A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	25				20		A
TYPICAL JUNCTION CAPACITANCE MEASURED AT 1MHZ AND APPLIED REVERSE VOLTAGE AT 4.0 VOLTAS	C_J	7				5		PF
TYPICAL THERMAL RESISTANCE (NOTE 1)	$R_{\theta ja}$	50						°C/W
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 150						°C
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 125						°C

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

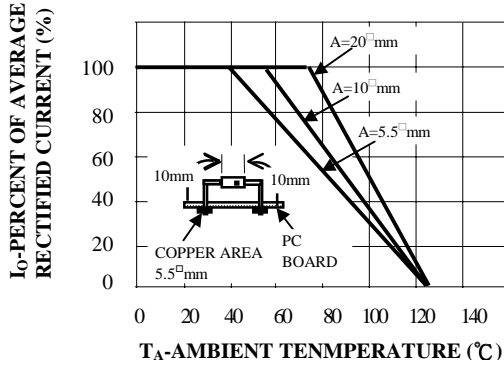
CHARACTERISTICS	SYMBOL	GP02-25	GP02-30	GP02-35	GP02-40	GP02-50	GP02-60	UNITS	
MAXIMUM FORWARD VOLTAGE AT I_O DC	V_F	3.0		5.0		7.0		V	
MAXIMUM REVERSE CURRENT AT 25°C	I_R	5							μA
MAXIMUM REVERSE CURRENT AT 100°C	I_R	50							μA

NOTE :

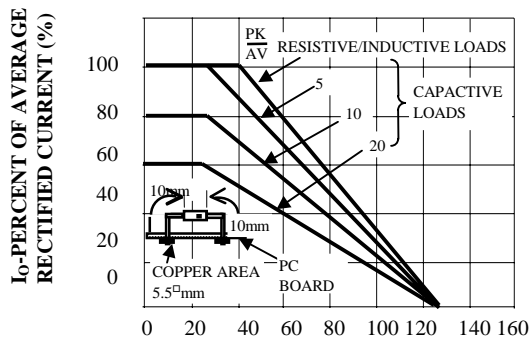
1. BOTH LEADS ATTACHED TO HEATSINK 20x 20x 1t(mm) COPPER PLATE AT LEAD LENTH 5mm

RATINGS AND CHARACTERISTICS CURVES GP02-25 THRU GP02-60

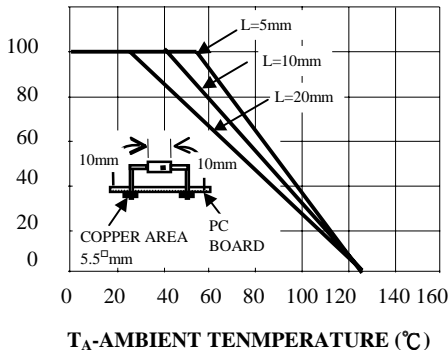
**FIG. 1 MAXIMUM CURRENT RATING
EFFECT OF COPPER AREA.
RESISTIVE/INDUCTIVE LOAD**



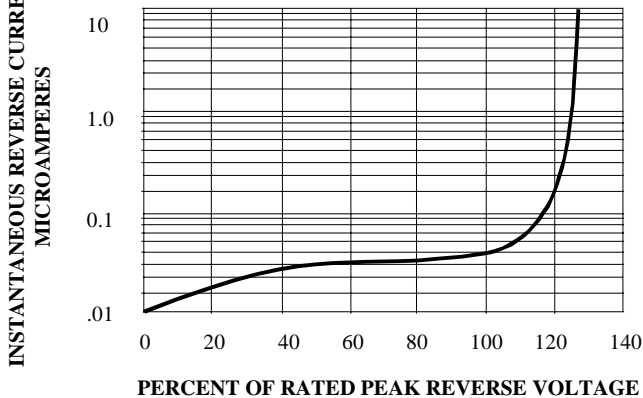
**FIG. 2 MAXIMUM CURRENT RATING
CAPACITIVE LOAD,
10mm LEAD LENGTHS**



**FIG. 3 MAXIMUM CURRENT RATING
EFFECT OF COPPER AREA.
RESISTIVE/INDUCTIVE LOAD**



**FIG. 4 TYPICAL REVERSE CHARACTERISTICS
AT T_J=25°C**



**FIG. 5 MAXIMUM FORWARD SURGE
VS NUMBER OF CYCLES**

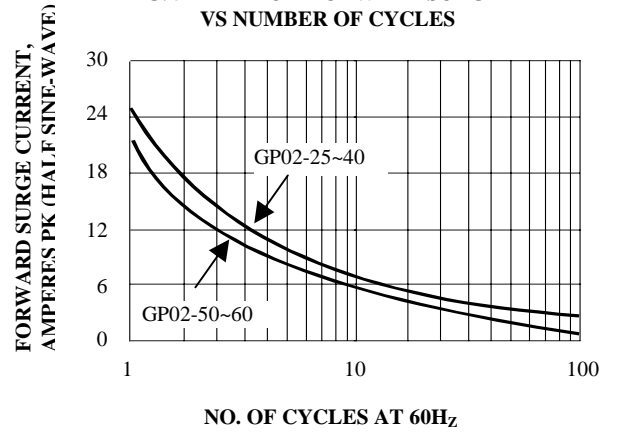


FIG. 6 TYPICAL JUNCTION CAPACITANCE

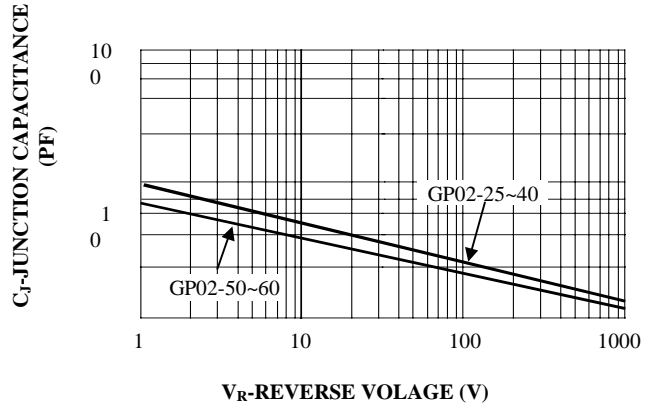


FIG. 7 TYPICAL FORWARD CHARACTERISTICS

