



Micro Commercial Components  
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# GP02-35 THRU GP02-60

## Features

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

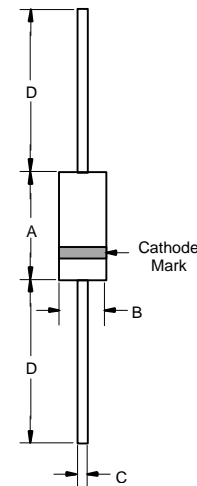
## 0.2 Amp High Voltage Silicon Rectifier 3500 - 6000 Volts

## Maximum Ratings

- Operating Junction Temperature -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance : 50°C/W Junction To Ambient (NOTE1)

Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GP02-35	GP02-35	3500V	2450V	3500V
GP02-40	GP02-40	4000V	2800V	4000V
GP02-50	GP02-50	5000V	3500V	5000V
GP02-60	GP02-60	6000V	4200V	6000V

## DO-15



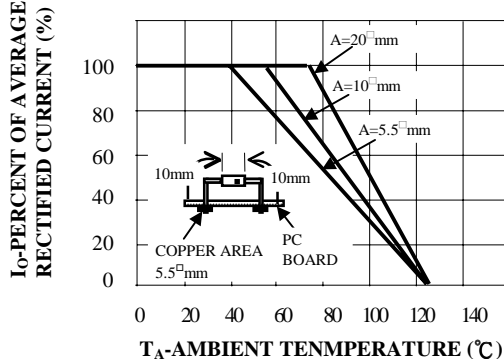
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	0.2A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current GP02-35~40 GP02-50~60	$I_{FSM}$	25 A 20 A	8.3ms, half sine
Maximum Instantaneous Forward Voltage GP02-35~40 GP02-50~60	$V_F$	5.0 V 7.0 V	$I_{FM} = 0.2\text{A};$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu\text{A}$ 50 $\mu\text{A}$	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Typical Junction Capacitance GP02-35~40 GP02-50~60	$C_J$	7 pF 5 pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

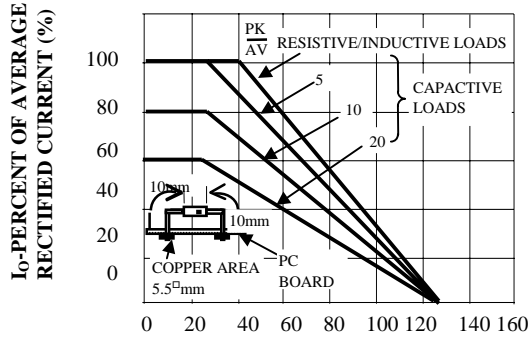
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.230	.300	5.80	7.60	
B	.104	.140	2.60	3.60	
C	.026	.034	.70	.90	
D	1.000	---	25.40	---	

NOTE: 1. BOTH LEADS ATTACHED TO HEATSINK 20\* 20\* 1t(mm)  
 COPPER PLATE AT LEAD LENGTH 5mm

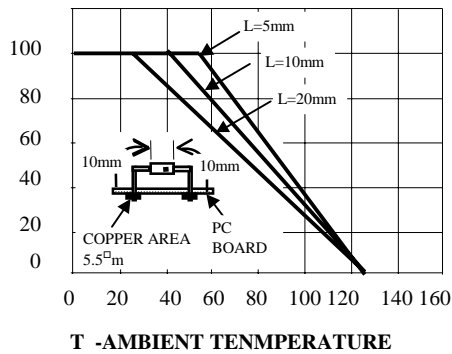
**FIG. 1 MAXIMUM CURRENT RATING  
EFFECT OF COPPER AREA.  
RESISTIVE/INDUCTIVE LOAD**



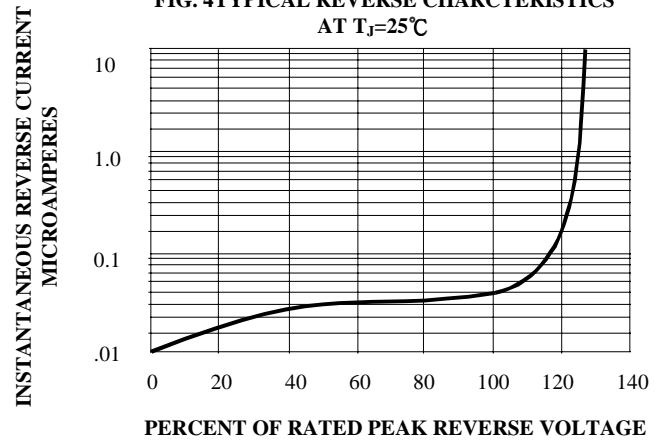
**FIG. 2 MAXIMUM CURRENT RATING  
CAPACITIVE LOAD,  
10mm LEAD LENGTHS**



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



**FIG. 4 TYPICAL REVERSE CHARACTERISTICS  
AT T<sub>J</sub>=25°C**



GP02-35 THRU GP02-60  
RATINGS AND CHARACTERISTICS CURVES

FIG. 5 MAXIMUM FORWARD SURGE VS NUMBER OF CYCLES

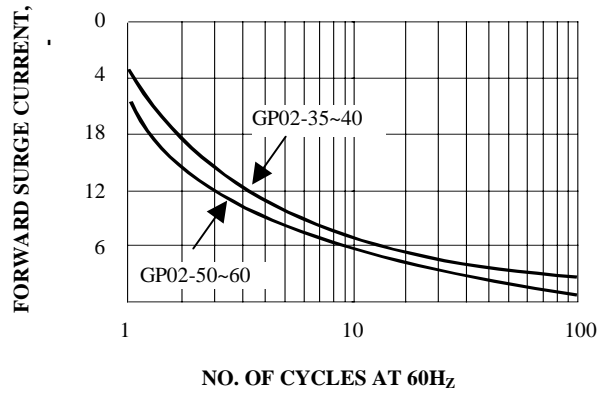


FIG. 6 TYPICAL JUNCTION CAPACITANCE

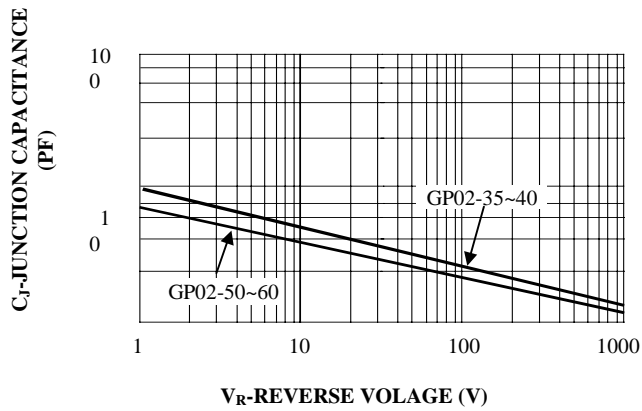


FIG. 7 TYPICAL FORWARD CHARACTERISTICS

