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HIGH VOLTAGE SILICON RECTIFIER

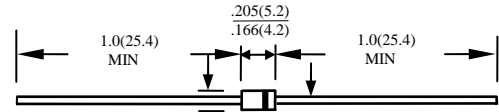
GP02-25 THRU GP02-60

FEATURES

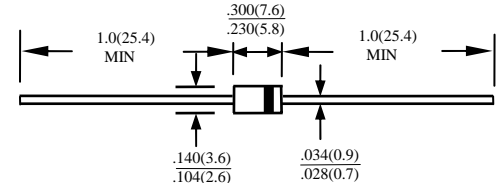
- AVALANCHE OPERATION
- UL 94V0 FLAME RETARDANT EPOXY MOLDING COMPOUND
- BEVELED ROUND CHIP
- LOW COST

MECHANICAL DATA

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



CASE: DO41
GP02-25~GP02-30



CASE: DO15
GP02-35~GP02-60

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 0.375"(9.5mm) LEAD LENGTH AT $T_A=55^\circ\text{C}$	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 VOLTS	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 ($A_T T_A = 25^\circ\text{C}$ 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 HEAT SINK 20×20×1t(mm) COPPER PLATE AT LEAD LENGTH 5mm

RATINGS AND CHARACTERISTICS CURVES GP02-25 THRU GP02-60

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

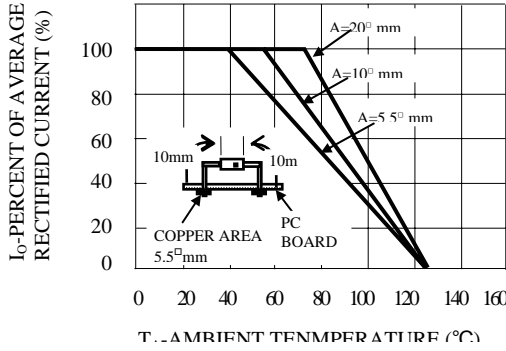


FIG. 2 MAXIMUM CURRENT RATING
CAPACITIVE LOAD,
10mm LEAD LENGTHS

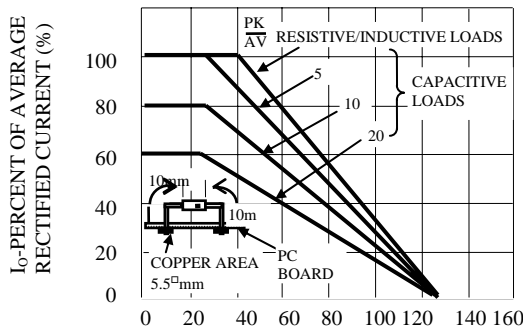


FIG. 3 MAXIMUM CURRENT RATING
EFFECT OF COPPER AREA.
RESISTIVE/INDUCTIVE LOAD

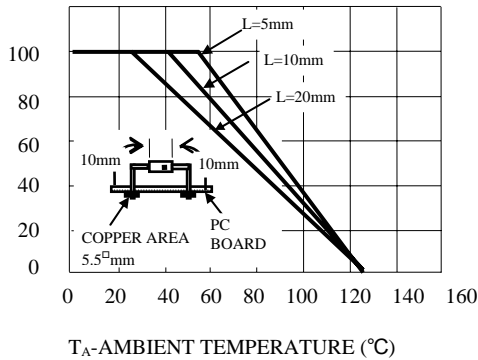


FIG. 4 TYPICAL REVERSE CHARACTERISTICS
AT T_j=25°C

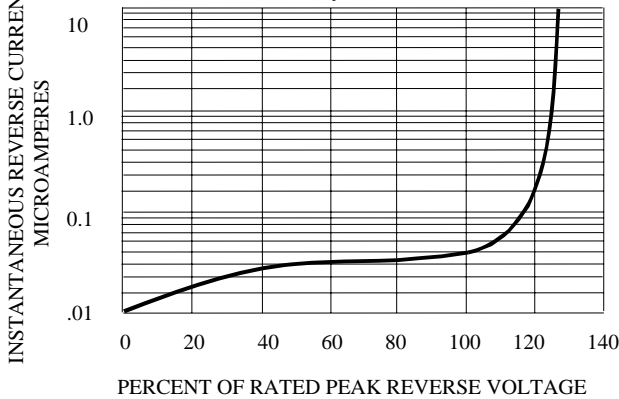


FIG. 5 MAXIMUM FORWARD SURGE
VS NUMBER OF CYCLES

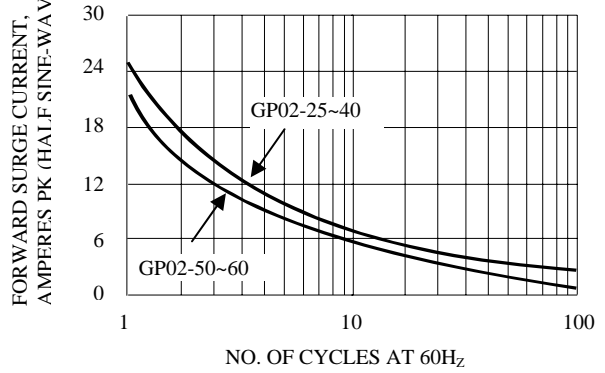


FIG. 6 TYPICAL JUNCTION CAPACITANCE

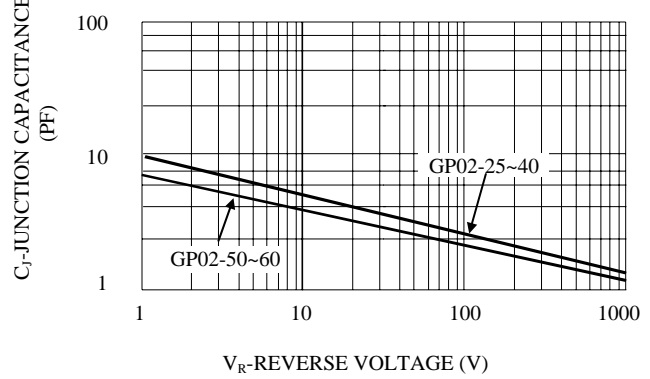


FIG. 7 TYPICAL FORWARD CHARACTERISTICS

