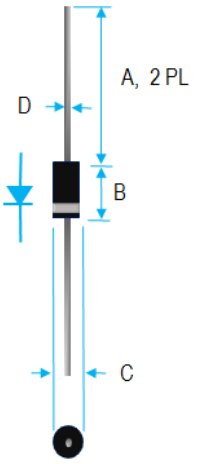
GP05-10 THRU GP05-20 SPECIFICATIONS

Rev. A

FAST RECOVERY HIGH VOLTAGE RECTIFIER



Dim.	Value Inch[mm] Min.	Max.
A	1.000[25.40]	---
B	0.166[4.22]	0.205[5.21]
C	0.080[2.03]	0.107[2.72]
D	0.028[0.71]	0.034[0.86]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. BEVELED ROUND CHIP, AVALANCHE OPERATION
3. CASE: DO-41 TRANSFER MOLDED
4. DIMENSIONS IN INCHES AND (MILLIMETERS)
5. POLARITY: INDICATED BY CATHODE BAND
6. WEIGHT: DO-41 0.34 GRAMS
7. LEADS: SOLDERABILITY PER MIL-STD-202 METHOD 208
8. RoHS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED STORAGE AND OPERATING TEMPERATURE RANGE -55°C TO +150°C. SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.

RATINGS	SYMBOL	VALUE	UNITS
AVERAGE FORWARD RECTIFIED CURRENT AT L=10mm TA=55°C	I_O	0.5	A
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	30	A
TYPICAL JUNCTION CAPACITANCE (NOTE3)	C_J	9	pF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta ja}$	50	°C/W
MAXIMUM FORWARD VOLTAGE	V_F	2	V
MAXIMUM REVERSE CURRENT @ 25°C, VDC	I_R	5	uA
MAXIMUM REVERSE CURRENT @ 100°C	I_R	50	uA

1. MEASURED @ 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 V
2. BOTH LEADS ATTATCHED TO HEATSINK 20×20×1T (mm) COPPER PLATE AT LEAD LENTH 5mm
3. MAXIMUM FORWARD VOLTAGE AT I_o DC

PART NUMBER	MAX RECURRENT PK REV VOLTAGE V_{RRM} (V)	MAX RMS VOLTAGE V_{RMS} (V)	MAX DC BLOCKING VOLTAGE V_{DC} (V)
GP05-10	1000	700	1000
GP05-15	1500	1050	1500
GP05-18	1800	1260	1800
GP05-20	2000	1400	2000

RATING AND CHARACTERISTIC CURVES

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

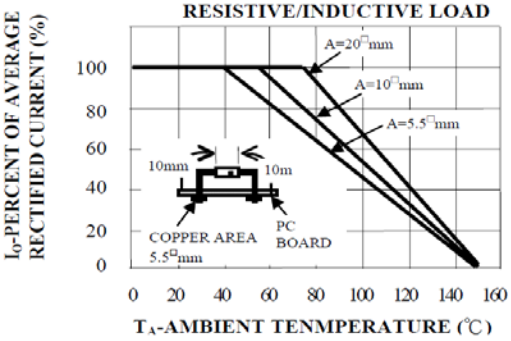


FIG. 2-MAXIMUM CURRENT RATING
CAPACITIVE LOAD,
10mm LEAD LENGTHS

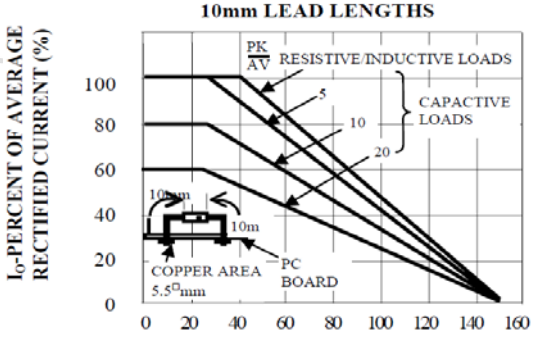


FIG. 3-MAXIMUM CURRENT RATING
EFFECT OF COPPER AREA.
RESISTIVE/INDUCTIVE LOAD

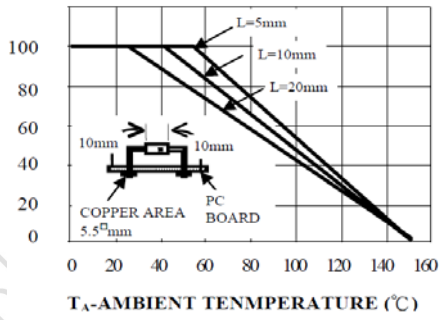


FIG. 4-TYPICAL REVERSE CHARCTERISTICS
AT T_J=25℃

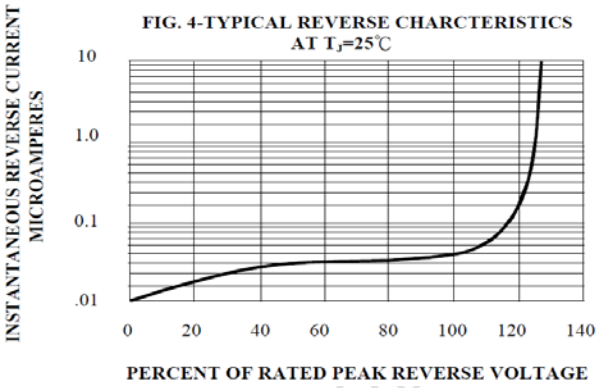


FIG. 5-MAXIMUM FORWARD SURGE
VS NUMBER OF CYCLES

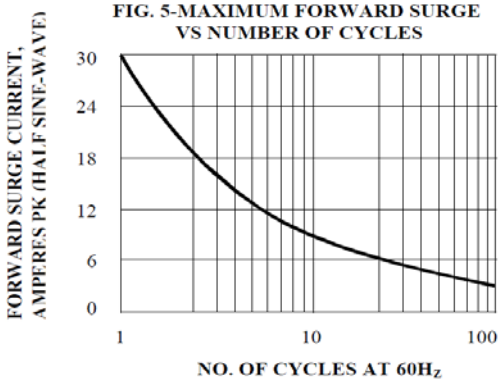


FIG. 6-TYPICAL JUNCTION CAPACITANCE

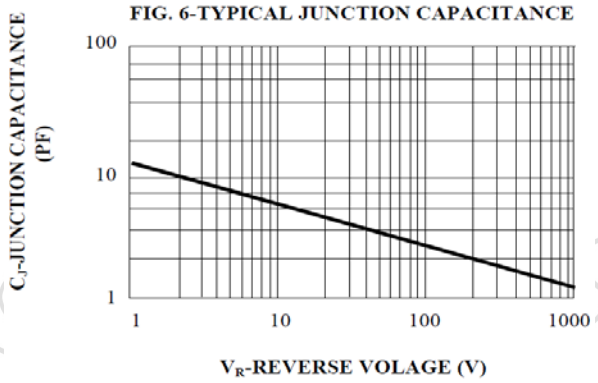


FIG. 7 TYPICAL FORWARD
CHARACTERISTICS