



Frontier Electronics Corp.

667 E. COCHRAN STREET, SIMI VALLEY, CA 93065

TEL: (805) 522-9998 FAX: (805) 522-9989

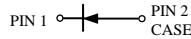
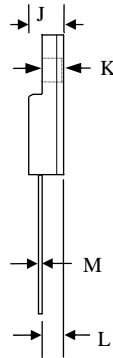
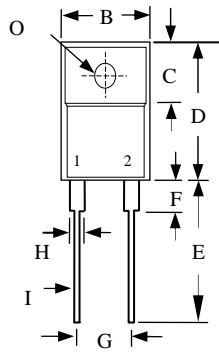
E-mail: frontiersales@frontierusa.com

Web: <http://www.frontierusa.com>

15A GLASS PASSIVATED STANDARD RECTIFIER

GPF15-005 THRU GPF150-10

CASE : ITO-220AC(GPF150-XX), FULLY INSULATED PACKAGE



	MILLIMETERS	
	MIN	MAX
B	9.72	10.27
C	6.30	6.90
D	14.50	15.50
E	13.00	13.80
F	-	4.1
G	4.95	5.20
H	-	1.52
I	-	0.9
J	-	4.8
K	-	3.1
L	2.5	2.9
M	-	0.8
O	-	Ø 3.4

FEATURES

- LOW FORWARD VOLTAGE
- LOW THERMAL RESISTANCE
- HIGH CURRENT CAPABILITY
- HIGH VOLTAGE
- GLASS PASSIVATED CHIP JUNCTION

MECHANICAL DATA

- CASE: TRANSFER MOLDED
- TERMINAL: MIL-STD-202F METHOD 2026
- POLARITY: AS MARKED
- EPOXY: UL94V-0 FLAME RETARDANT MOLDING COMPOUND
- WEIGHT 1.81 GRAMS

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	GPF150-005	GPF150-01	GPF150-02	GPF150-04	GPF150-06	GPF150-08	GPF150-10	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 SEE FIG.1	I_O	15.0							A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	250							A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	100							PF
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 150							°C
OPERATING JUNCTION TEMPERATURE RANGE	T_{OP}	- 55 TO + 150							°C

ELECTRICAL CHARACTERISTICS ($A_T T_A = 25^\circ C$ UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	GPF150-005	GPF150-01	GPF150-02	GPF150-04	GPF150-06	GPF150-08	GPF150-10	UNITS
MAXIMUM FORWARD VOLTAGE AT I_O DC	V_F	1.10							V
MAXIMUM DC REVERSE CURRENT AT $T_A = 25^\circ C$	I_R	10							μA
MAXIMUM DC BLOCKING VOLTAGE AT $T_A = 125^\circ C$	I_R	1.0							mA

- NOTES: 1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. THERMAL RESISTANCE JUNCTION TO CASE PER LEG MOUNTED ON HEAT SINK

RATINGS AND CHARACTERISTIC CURVE GPF150-005 THRU GPF150-10

FIG. 1 – FORWARD CURRENT DERATING CURVE

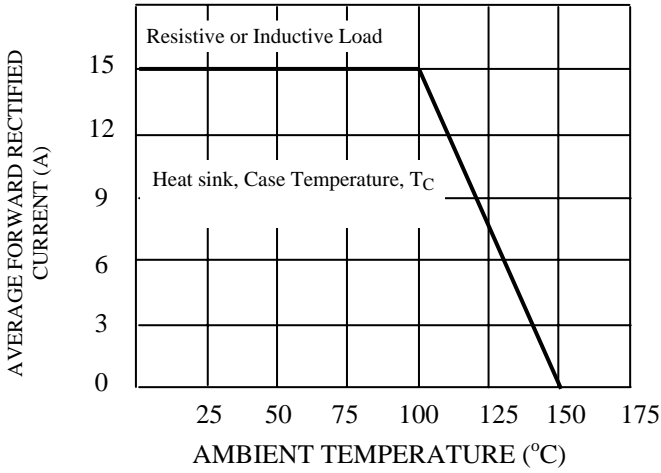


FIG. 2 -MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

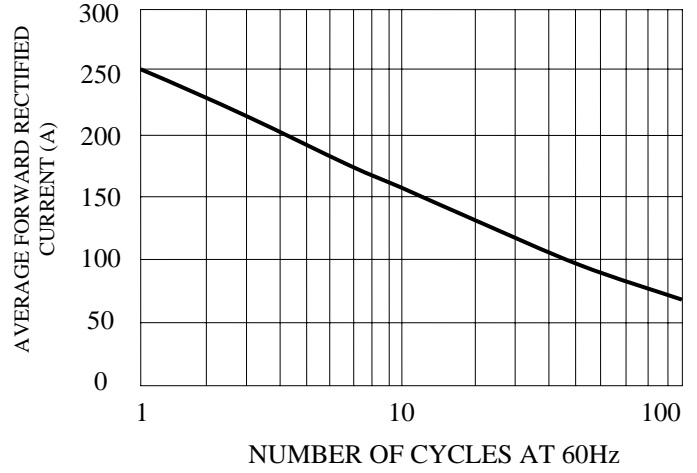


FIG. 3 -TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

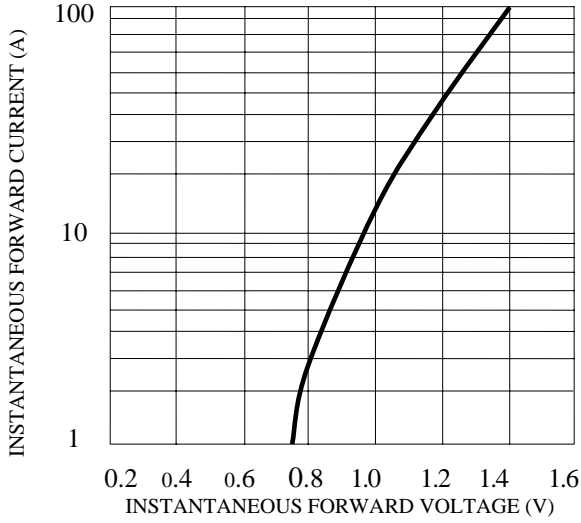


FIG. 4 -TYPICAL REVERSE CHARACTERISTICS

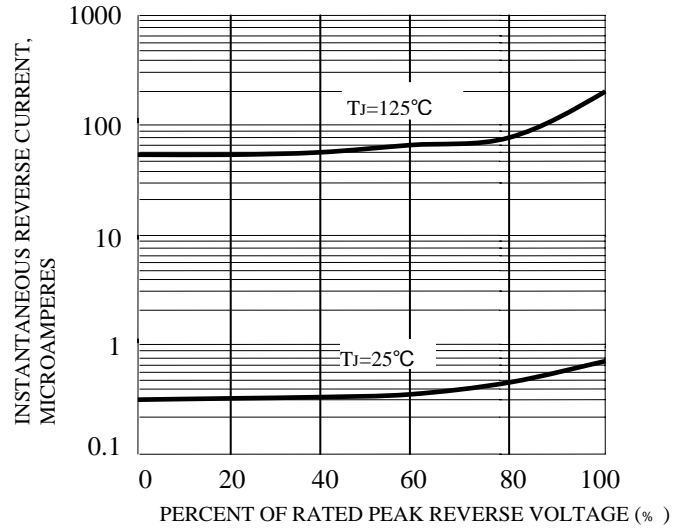


FIG. 5 -TYPICAL JUNCTION CAPACITANCE

