



# Frontier Electronics Corp.

667 E. COCHRAN STREET, SIMI VALLEY, CA 93065

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

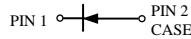
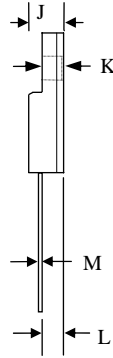
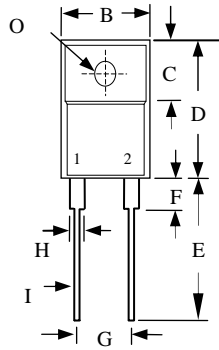
E-mail: [frontiersales@frontierusa.com](mailto:frontiersales@frontierusa.com)

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	GPF150	GPF150	GPF150	GPF150	GPF150	GPF150	UNITS
		-005	-01	-02	-04	-06	-08	-10	
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	GPF150	GPF150	GPF150	GPF150	GPF150	GPF150	UNITS
		-005	-01	-02	-04	-06	-08	-10	
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							$\mu A$
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

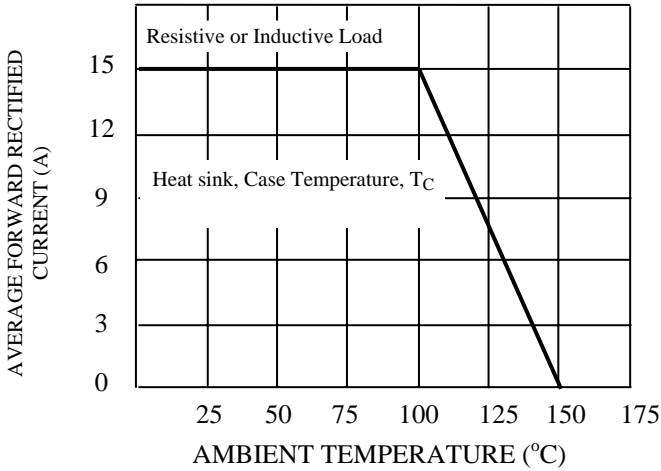


FIG. 2 -MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

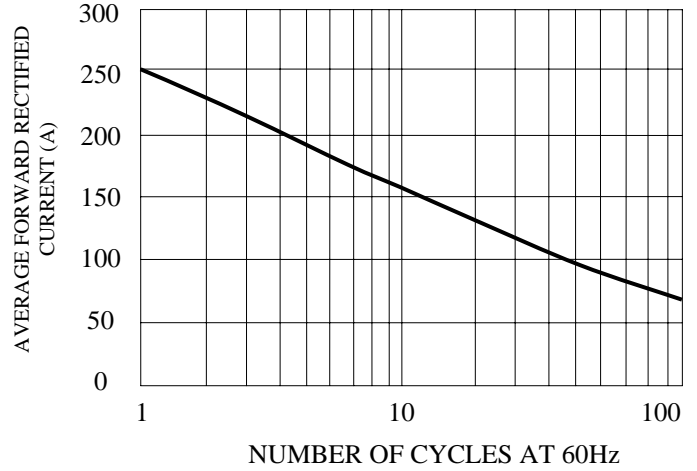


FIG. 3 -TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

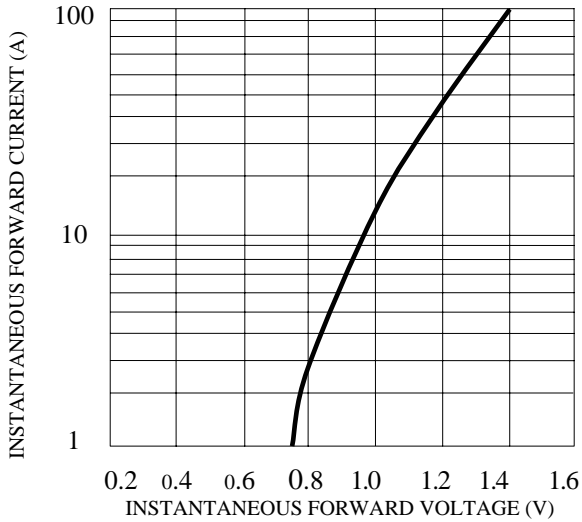


FIG. 4 -TYPICAL REVERSE CHARACTERISTICS

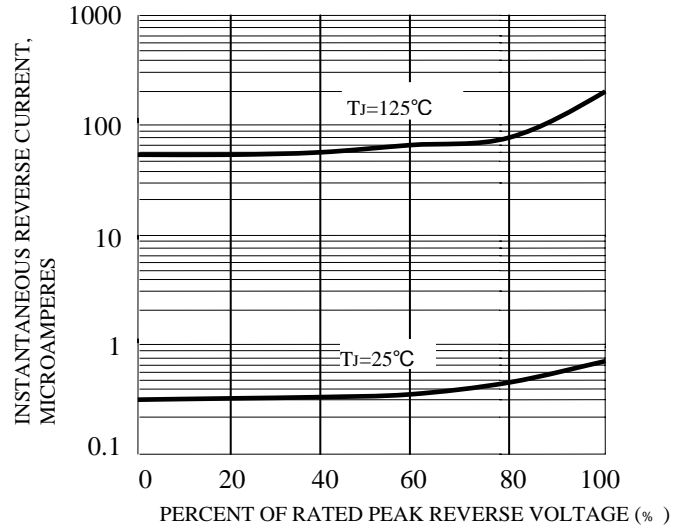


FIG. 5 -TYPICAL JUNCTION CAPACITANCE

