

**HYPER-FAST
GLASS PASSIVATED RECTIFIER**

**REVERSE VOLTAGE – 600Volts
FORWARD CURRENT – 8.0 Ampere**

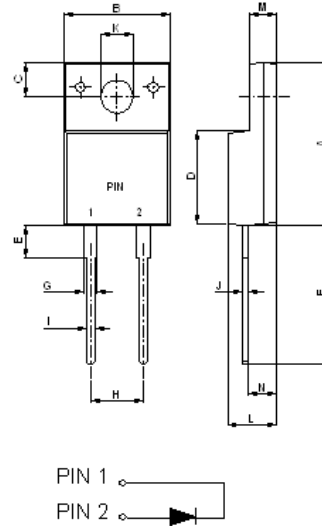
FEATURES

- Soft, Hyper fast switching capability
- Specially suited for critical mode Power Factor Corrections.
- High reliability and efficiency

MECHANICAL DATA

- Case: JEDEC ITO-220AC
- Case Material: Plastic material, UL flammability classification 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Lead Free Plating
- Polarity indicator: As marked on the body
- Weight: 0.05 ounces, 1.497 grams
- Component in accordance to RoHs 2002/95/EC
- Maximum mounting torque = 0.5 N.m (5.1 Kgf.cm)

ITO-220AC



ITO-220AC		
DIM.	MIN.	MAX.
A	14.95	15.95
B	10.0	10.40
C	2.76	3.36
D	8.50	8.80
E	3.30	3.90
F	13.00	13.70
G	1.15	1.70
H	4.95	5.25
I	0.50	0.80
J	0.45	0.70
K	3.00 \varnothing	3.30 \varnothing
L	4.46	4.87
M	2.48	2.80
N	2.50	2.80

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Average Rectified Output Current	I_F	8.0	A
Non-repetitive avalanche energy	E_{AS}	21.7	mJ
Non Repetitive Forward Surge Current	I_{FSM}	160 80	A
Operation and Storage temperature range	T_J, T_{STG}	-55 to +175	°C

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	MIN	TYP	MAX	UNIT
Forward Voltage (1)	$I_F=8.0A$ $T_j=25^\circ C$ $T_j=125^\circ C$	V_F	-	- 1.4	2.9 1.8	V
Reverse Leakage Current	$V_R=600V$ $T_j=25^\circ C$ $T_j=125^\circ C$	I_R	-	- 35	30 400	μA

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNIT
Typical thermal resistance, Junction to Case (2)	$R_{\theta JC}$	5	°C/W
	$R_{\theta JL}$	7	
	$R_{\theta JA}$	16	

DYNAMIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	MIN	TYP	MAX	UNIT
Reverse recovery time	$I_F=0.5A, I_{rr}=0.25A, I_R=1.0A$ $T_j=25^\circ C$	t_{rr}	-	-	25	ns
	$I_F=1A, dI_F/dt=-50A/\mu s, V_R=30V$ $T_j=25^\circ C$	t_{rr}	-	-	45	
Reverse recovery current	$I_F=8A, dI_F/dt=-200A/\mu s, V_R=400V$	I_{RM}	-	5.5	7.2	A
Reverse recovery charges		Q_{rr}	-	150	-	nC

Note :

- (1) 300us Pulse Width, 2% Duty Cycle.
- (2) Thermal Resistance test performed in accordance with JESD-51. R_{thj-L} is measured at the PIN 2, R_{thj-C} is measured at the top centre of body.

REV. 2, Apr-2016, KTGC50

FIG.1- FORWARD CURRENT DERATING CURVE

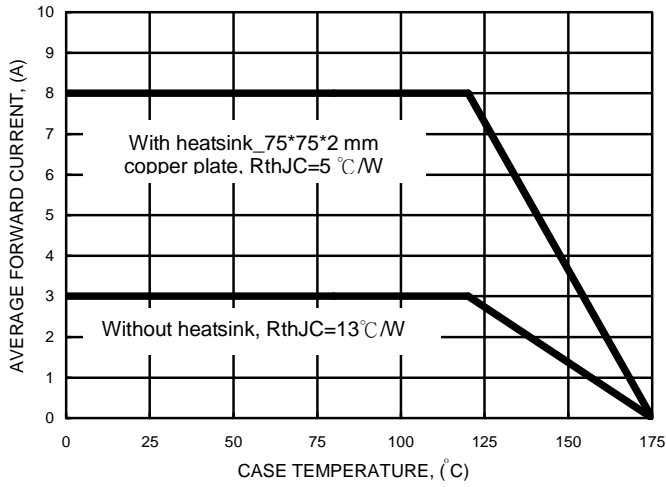


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

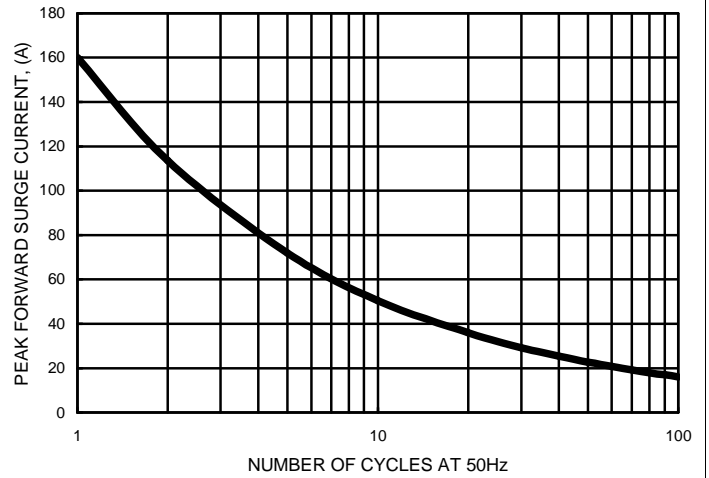


FIG.3- TYPICAL FORWARD CHARACTERISTICS

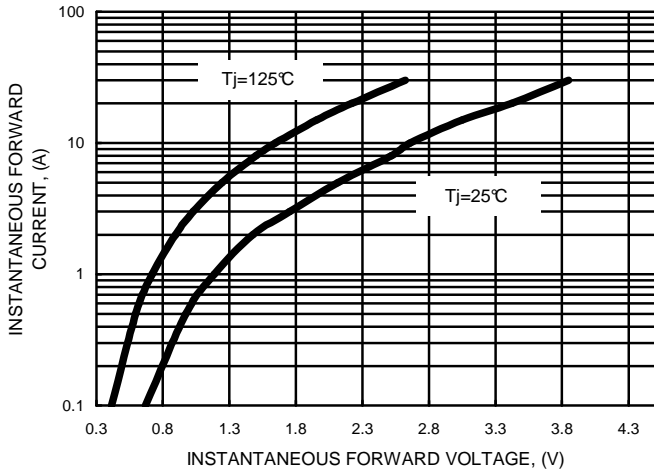


FIG.4- TYPICAL JUNCTION CAPACITANCE

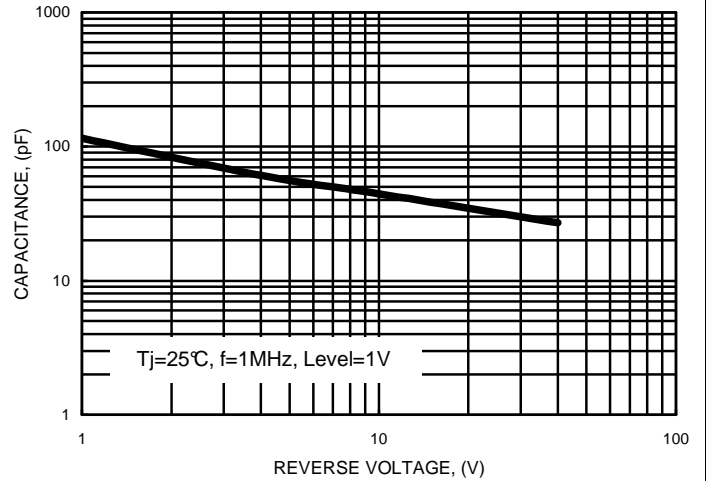
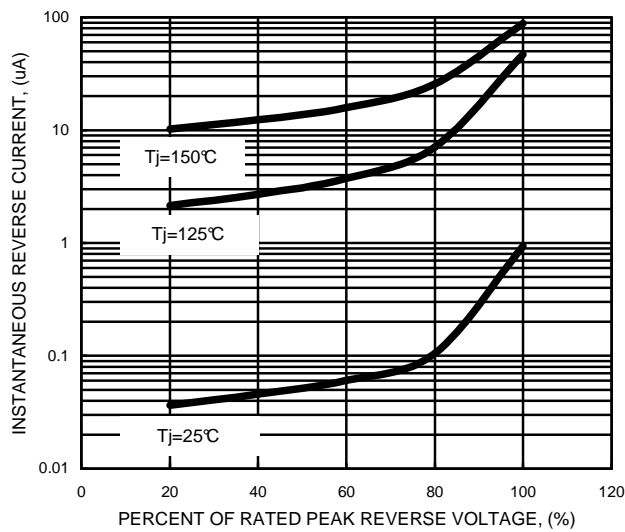


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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