



# 10A, 600V Isolated Ultra Fast Rectifier

#### **FEATURES**

- High efficiency, low VF
- High current capability
- High reliability
- High surge current capability
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21







#### MECHANICAL DATA

Case: ITO-220AB

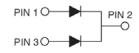
Molding compound: UL flammability classification rating 94V-0 Packing code with suffix "G" means green compound (halogen-free) **Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

Polarity: As marked

**Mounting torque:** 0.56 Nm max. **Weight:** 1.7 g (approximately)

# ITO-220AB



MAXIMUM RATINGS AND ELECTRICAL CHA	ARACTERISTICS	(T <sub>A</sub> =25°C unless otherwise noted)	
PARAMETER	SYMBOL	UGF10L08G	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	600	V
Maximum RMS voltage	V <sub>RMS</sub>	420	V
Maximum DC blocking voltage	V <sub>DC</sub>	600	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	10	А
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	70	А
Maximum instantaneous forward voltage (Note 1) $I_F$ = 5 A	V <sub>F</sub>	1.7	V
T <sub>J</sub> =25°C		10	
Maximum reverse current @ rated V <sub>R</sub> T <sub>J</sub> =125°C	I <sub>R</sub>	100	μA
Maximum reverse recovery time (Note 2)	t <sub>rr</sub>	25	ns
Typical thermal resistance	$R_{ heta JC}$	4	°C/W
Operating junction temperature range	TJ	- 55 to +150	°C
Storage temperature range	T <sub>STG</sub>	- 55 to +150	°C

Note 1: Pulse test with PW=300 $\mu$ s, 1% duty cycle Note 2: Test conditions:  $I_F$ =0.5A,  $I_R$ =1.0A,  $I_{RR}$ =0.25A



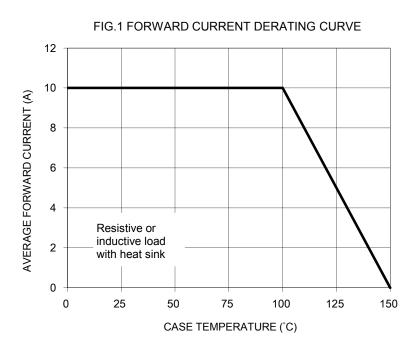
ORDERING INFORMATION				
PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
UGF10L08G (Note 1)	C0	G	ITO-220AB	50 / Tube

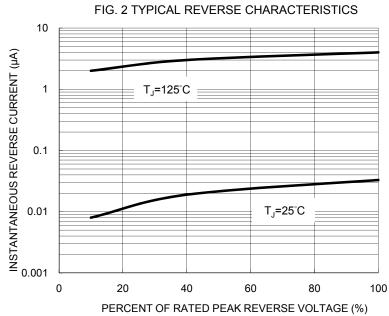
Note 1: Whole series with green compound

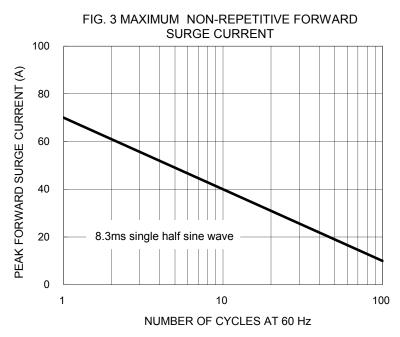
EXAMPLE					
EXAMPLE P/N	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION	
UGF10L08G C0G	UGF10L08G	C0	G	Green compound	

### RATINGS AND CHARACTERISTICS CURVES

 $(T_A=25^{\circ}C \text{ unless otherwise noted})$ 







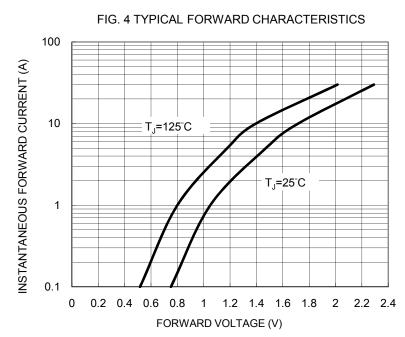
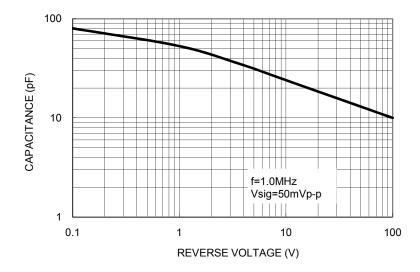


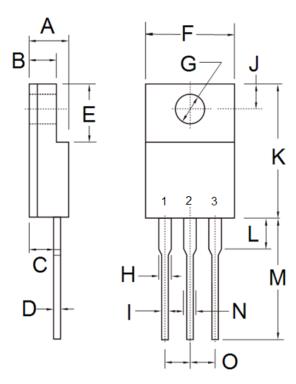


FIG. 5 TYPICAL JUNCTION CAPACITANCE



### PACKAGE OUTLINE DIMENSIONS

### ITO-220AB



DIM.	Unit	(mm)	Unit (inch)		
Dilvi.	Min	Max	Min	Max	
Α	4.30	4.70	0.169	0.185	
В	2.50	3.16	0.098	0.124	
С	2.30	2.96	0.091	0.117	
D	0.46	0.76	0.018	0.030	
Е	6.30	6.90	0.248	0.272	
F	9.60	10.30	0.378	0.406	
G	3.00	3.40	0.118	0.134	
Н	0.95	1.45	0.037	0.057	
I	0.50	0.90	0.020	0.035	
J	2.40	3.20	0.094	0.126	
K	14.80	15.50	0.583	0.610	
L	-	4.10	-	0.161	
М	12.60	13.80	0.496	0.543	
N	-	1.80	-	0.071	
0	2.41	2.67	0.095	0.105	

# MARKING DIAGRAM



P/N = Specific Device Code
G = Green Compound
YWW = Date Code
F = Factory Code

Version: A1601







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Version: A1601