

10A, 200V - 600V Isolated Ultra Fast Rectifiers

FEATURES

- High efficiency, low VF
- High current capability
- High reliability
- High surge current capability
- UL Recognized File # E-326243
- 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

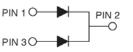
Molding compound, UL flammability classification rating 94V-0 Part no. with suffix "H" means AEC-Q101 qualified Packing code with suffix "G" means green compound (halogen-free) **Terminal:** Matte tin plated leads, solderable per JESD22-B102 Meet JESD 201 class 2 whisker test **Polarity:** As marked **Mounting torque:** 5 in-lbs maximum **Weight:** 1.7 g (approximately)











MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)							
PARAMETER	SYMBOL	UGF	UGF	UGF	UGF	UGF	UNIT
	STMBOL	1004G	1005G	1006G	1007G	1008G	
Maximum repetitive peak reverse voltage	V _{RRM}	200	300	400	500	600	V
Maximum RMS voltage	V _{RMS}	140	210	280	350	420	V
Maximum DC blocking voltage	V _{DC}	200	300	400	500	600	V
Maximum average forward rectified current	I _{F(AV)}	10			А		
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	70			A		
Maximum instantaneous forward voltage (Note 1) I _F = 5 A	V _F	0.95	1.25 1.70		70	V	
T _J =25°C		10				μΑ	
Maximum reverse current @ rated V _R T _J =125°C	I _R	100					
Maximum reverse recovery time (Note 2)	t _{rr}	20 25		5	ns		
Typical thermal resistance	$R_{ extsf{ heta}JC}$	6.0		°C/W			
Operating junction temperature range	TJ	- 55 to +175 - 55 to +150		o +150	°C		
Storage temperature range	T _{STG}	- 55 to +175 - 55 to +150		o +150	°C		

Note 1: Pulse Test with PW=300µs, 1% Duty Cycle

Note 2: Reverse Recovery Test Conditions: I_F =0.5A, I_R =1.0A, I_{RR} =0.25A



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ORDERING INFORMATION

PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX ^(*)	PACKAGE	PACKING
UGF100xG (Note 1)	Н	C0	G	ITO-220AB	50 / Tube

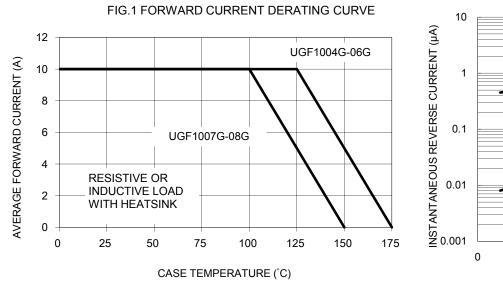
Note 1: "xx" defines voltage from 200V (UGF1004G) to 600V (UGF1008G)

*: Optional available

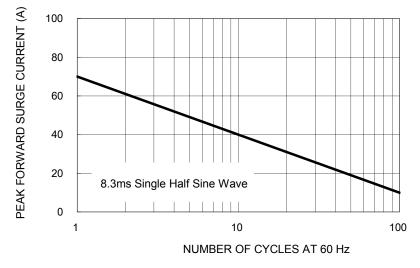
EXAMPLE						
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION	
UGF1004GHC0G	UGF1004G	Н	C0	G	AEC-Q101 qualified Green compound	

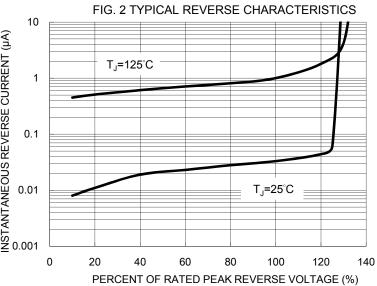
RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

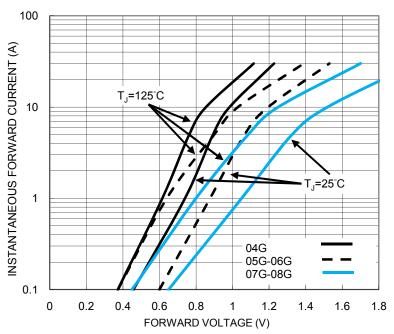








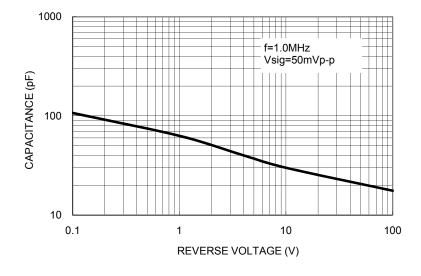




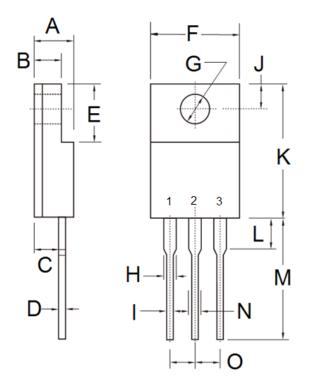
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FIG. 5 TYPICAL JUNCTION CAPACITANCE







G

F

DIM.	Unit	(mm)	Unit (inch)		
	Min	Max	Min	Max	
А	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	
E	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 = Green Compound

YWW = Date Code

= Factory Code



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