



10A, 50V - 600V Isolated Glass Passivated Super Fast Rectifiers

FEATURES

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



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: 0.56 Nm max. (5 in-lbs. max.)

Weight: 1.8 g (approximately)







PIN 1 O-	-	PIN 2
PIN 3O	4	

ITO-220AB

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)										
		SFF	SFF	SFF	SFF	SFF	SFF	SFF	SFF	
PARAMETER	SYMBOL	1001	1002	1003	1004	1005	1006	1007	1008	UNIT
		GA	GA	GA	GA	GA	GA	GA	GA	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	500	600	V
Maximum average forward rectified current	I _{F(AV)}	10						Α		
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	125					А			
Maximum instantaneous forward voltage (Note 1) $I_F = 5A$	V _F	0.975 1.3 1.7				.7	V			
Maximum reverse current @ rated V_R $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	I _R	10 400				μA				
Maximum reverse recovery time (Note 2)	mum reverse recovery time (Note 2) t _{rr} 35				ns					
Typical junction capacitance (Note 3)	C _J	70 50					pF			
Typical thermal resistance	$R_{ heta JC}$	8						°C/W		
Operating junction temperature range	T _J	- 55 to +150					°C			
Storage temperature range	T _{STG}	- 55 to +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.

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V DC.



ORDERING INFORMATION						
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING	
SFF100xGA (Note 1)	Н	C0	G	ITO-220AB	50 / Tube	

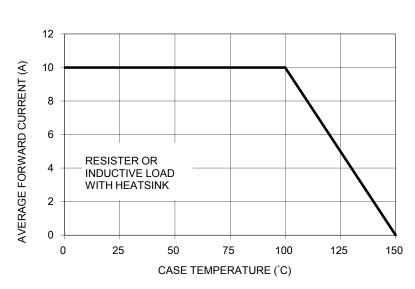
Note 1: "x" defines voltage from 50V (SFF1001GA) to 600V (SFF1008GA)

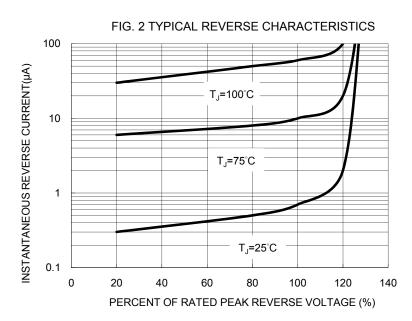
EXAMPLE								
PREFERRED P/N	PREFERRED P/N PART NO. PACKING CODE SUFFIX		PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION			
SFF1008GAHC0	SFF1008GA	Н	C0	G	AEC-Q101 qualified Green compound			

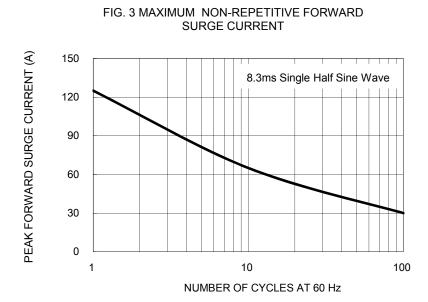
RATINGS AND CHARACTERISTICS CURVES

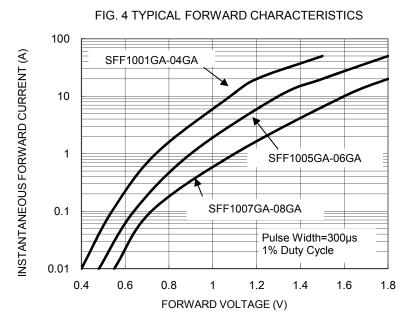
(T_A=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE









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FIG. 5 TYPICAL JUNCTION CAPACITANCE

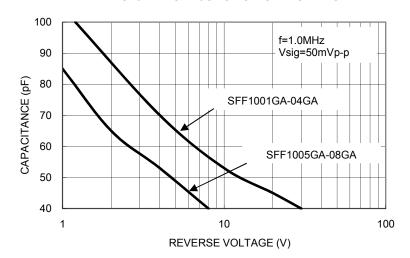
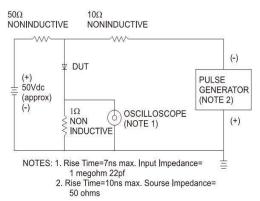
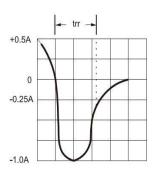
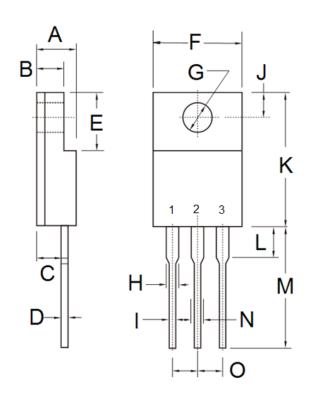


FIG.6 REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





PACKAGE OUTLINE DIMENSIONS ITO-220AB



DIM.	Unit	(mm)	Unit (inch)		
DIIVI.	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





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ACGRB207-HF CLH03(TE16L,Q) ACGRC307-HF ACEFC304-HF NTE6356 NTE6359 NTE6002 NTE6023 NTE6039 NTE6077
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