

Isolated Glass Passivated Super Fast Rectifiers

FEATURES

- High efficiency, low VF.
- High current capavility
- High reliability
- High surge current capability
- Low power loss.
- 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 definition

MECHANICAL DATA

Case: ITO-220AB

Molding compound, UL flammability classification rating 94V-0 Base P/N with suffix "G" on packing code - (green compound) halogen-free Base P/N with prefix "H" on packing code - AEC-Q101 qualified **Terminal:** Matte tin plated leads, solderable per JESD22-B102 Meet JESD 201 class 1A whisker test, with prefix "H" on packing code meet JESD 201 class 2 whisker test **Polarity:** As marked **Mounting torque:** 5 in-lbs maximum **Weight:** 1.7 g (approximately)

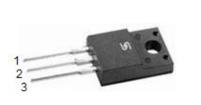
Weight: 1.7 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)											
DADAMETED	CVMDOL	SFF	SFF	SFF	SFF	SFF	SFF	SFF	SFF		
PARAMETER	SYMBOL	1001G	1002G	1003G	1004G	1005G	1006G	1007G	1008G	UNIT	
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		50	100	150	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}	125					A				
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)	Trr	35			ns						
Typical junction capacitance (Note 3)	Cj	70			5	50		pF			
Typical thermal resistance	$R_{ extsf{ heta}JC}$	2			^o C/W						
Operating junction temperature range	TJ	- 55 to +150			°C						
Storage temperature range	T _{STG}	- 55 to +150			°C						
Note 1: Pulse Test with PW=300us 1% Duty Cycle	•	•								•	

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 D.C.





ITO-220AB	,







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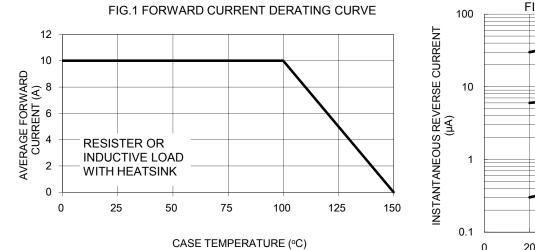
ORDERING INFORMATION							
PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING		
	QUALIFIED		CODE				
SFF100xG (Note 1)	Prefix "H"	C0	Suffix "G"	ITO-220AB	50 / Tube		

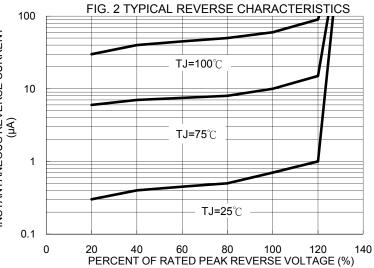
Note 1: "x" defines voltage from 50V (SFF1001G) to 600V (SFF1008G)

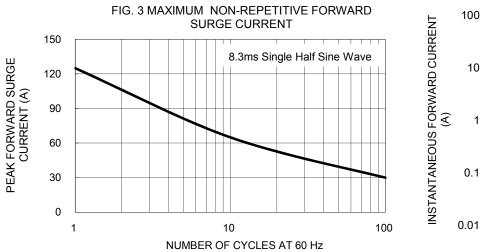
EXAMPLE								
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION			
SFF1008G C0	SFF1008G		C0					
SFF1008G C0G	SFF1008G		C0	G	Green compound			
SFF1008GHC0	SFF1008G	Н	C0		AEC-Q101 qualified			

RATINGS AND CHARACTERISTICS CURVES

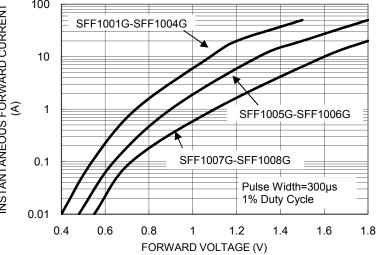
(TA=25°C unless otherwise noted)











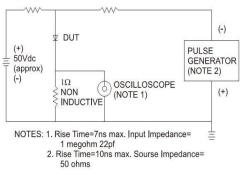


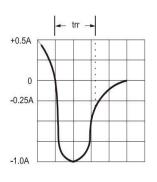
100 90 80 70 5FF1001G-SFF1004G

FIG. 5 TYPICAL JUNCTION CAPACITANCE

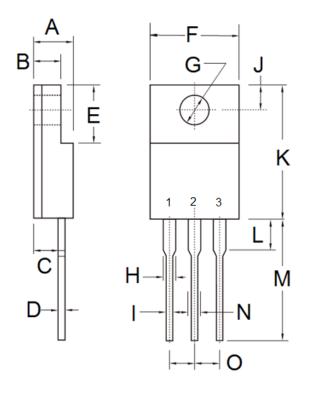
(H) 80 70 60 50 40 1 10 REVERSE VOLTAGE (V) FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

50Ω 10Ω NONINDUCTIVE NONINDUCTIVE





PACKAGE OUTLINE DIMENSIONS



P/N

YWW

G

F

DIM.	Unit	(mm)	Unit (inch)		
Dilvi.	Min	Min Max		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	
К	14.80	15.50	0.583	0.610	
L	-	4.10	-	0.161	
М	12.60	13.80	0.496	0.543	
Ν	-	1.80	-	0.071	
0	2.41	2.67	0.095	0.105	

MARKING DIAGRAM



= Specific Device Code

= Green Compound

= Date Code

= Factory Code



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