



Glass Passivated High Efficient Rectifiers

FEATURES

- Glass passivated chip junction
- Excellent high temperature switching
- Idally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
- Ultrafast recovery time for high efficiency
- Soft recovery characteristics
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition







DO-204AL (DO-41)

MECHANICAL DATA

Case: DO-204AL (DO-41)

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

Weight: 0.33g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERSTICS (T _A =25°ℂ unless otherwise noted)									
PARAMETER	SYMBOL	UF1A	UF1B	UF1D	UF1G	UF1J	UF1K	UF1M	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}	1				Α			
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	30					Α		
Maximum instantaneous forward voltage (Note 1) @ 1 A	V _F	1.0				1.7		V	
Maximum reverse current @ rated VR T_J =25 $^{\circ}$ C T_J =125 $^{\circ}$ C	I _R	5 150				μΑ			
Maximum reverse recovery time (Note 2)	Trr	50 75			ns				
Typical junction capacitance (Note 3)	Cj	17			pF				
Typical thermal resistance	R _{θJL} R _{θJA}	15 60				°C/W			
Operating junction temperature range	TJ	- 55 to +150			оС				
Storage temperature range	T _{STG}	- 55 to +150			оС				

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.



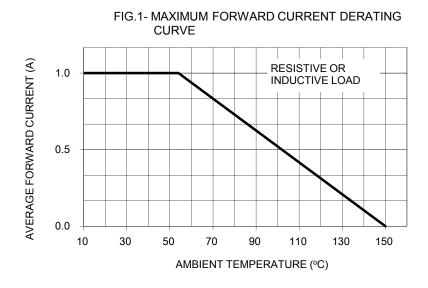
ORDERING INFORMATION						
PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING	
	QUALIFIED		CODE			
	A0	DO-41	3,000 / Ammo box (52mm taping)			
UF1x (Note 1)	Prefix "H"	R0	Suffix "G"	DO-41	5,000 / 13" Paper reel	
	FIGUX II	R1	Suillx G	DO-41	5,000 / 13" Paper reel (Reverse)	
		B0		DO-41	1,000 / Bulk packing	

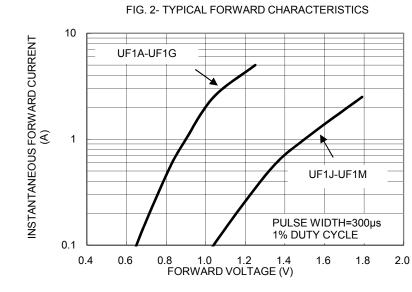
Note 1: "x" defines voltage from 50V (UF1A) to 1000V (UF1M)

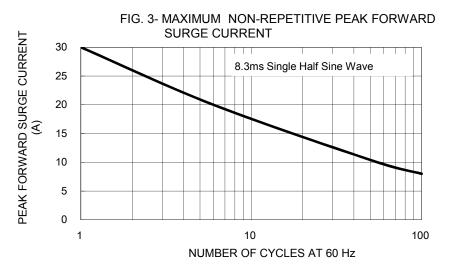
EXAMPLE							
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION		
UF1M A0	UF1M		A0				
UF1M A0G	UF1M		A0	G	Green compound		
UF1MHA0	UF1M	Н	A0		AEC-Q101 qualified		

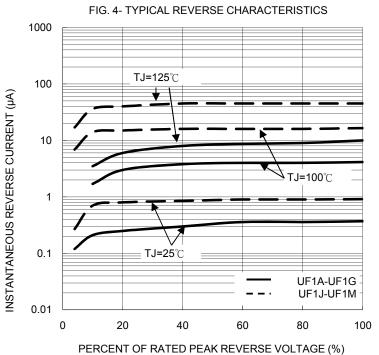
RATINGS AND CHARACTERISTICS CURVES

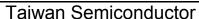
(TA=25°C unless otherwise noted)













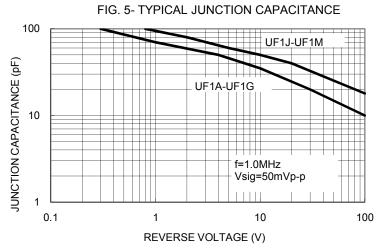
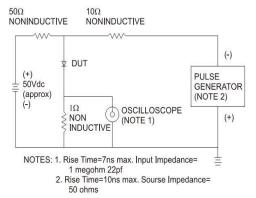
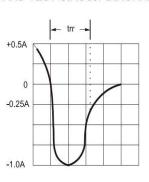
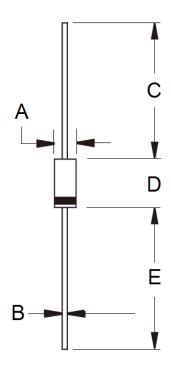


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





PACKAGE OUTLINE DIMENSIONS



DIM.	Unit	(mm)	Unit (inch)			
DIIVI.	Min	Max	Min	Max		
Α	2.00	2.70	0.079	0.106		
В	0.71	0.86	0.028	0.034		
С	25.40	-	1.000	-		
D	4.20	5.20	0.165	0.205		
E	25.40	-	1.000	-		

MARKING DIAGRAM



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

= Factory Code





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