

Glass Passivated Rectifiers

FEATURES

- Glass passivated chip junction
- High current capability, Low VF
- High reliability
- High surge current capability
- Low power loss, high efficiency
- 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: 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: 0.33 g (approximately)



DO-204AL (DO-41)





MAXIMUM RATINGS AND ELECTRICAL CHARACTERSTICS (T _A =25°C unless otherwise noted)									
PARAMETER	SYMBOL	1N 4001G	1N 4002G	1N 4003G	1N 4004G	1N 4005G	1N 4006G	1N 4007G	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				V			
Maximum reverse current @ rated VR T_J =25 $^{\circ}$ C T_J =125 $^{\circ}$ C	I _R	5 100			μΑ				
Typical junction capacitance (Note 2)	Cj				10				pF
Typical thermal resistance	$R_{ heta JA}$				80				°C/W
Operating junction temperature range	TJ			-	55 to +15	0			οС
Storage temperature range	T _{STG}			-	55 to +15	0			οС

Note1: Pulse Test with PW=300µs, 1% Duty Cycle

Note2: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.



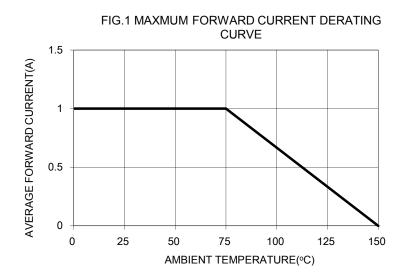
ORDERING INFORMATION						
PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING	
	QUALIFIED		CODE			
1N400xG (Note 1)	Prefix "H"	A0	Suffix "G"	DO-41	3,000 / Ammo box (52mm taping)	
		R0		DO-41	5,000 / 13" Paper reel	
		R1	Sullix G	DO-41	5,000 / 13" Paper reel (Reverse)	
		В0		DO-41	1,000 / Bulk packing	

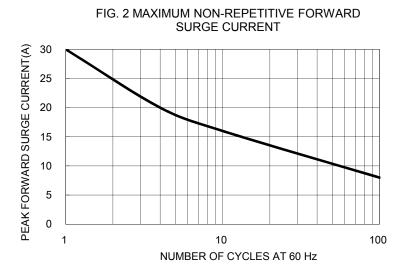
Note 1: "x" defines voltage from 50V (1N4001G) to 1000V (1N4007G)

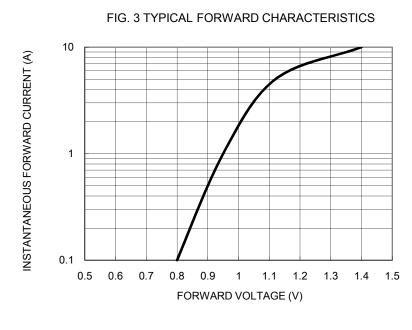
EXAMPLE							
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION		
1N4007G A0	1N4007G		A0				
1N4007G A0G	1N4007G		A0	G	Green compound		
1N4007GHA0	1N4007G	Н	A0		AEC-Q101 qualified		

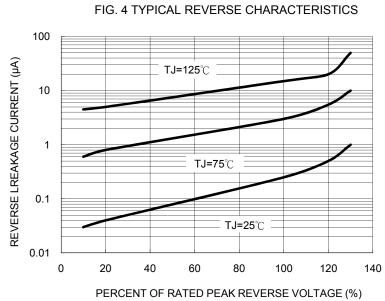
RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)





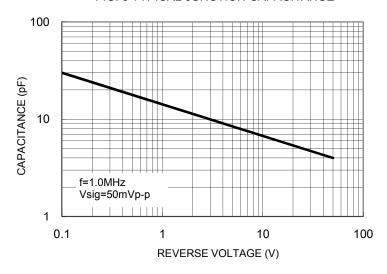




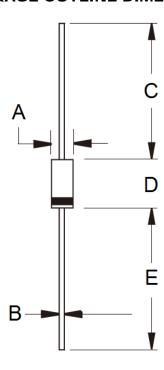
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FIG. 5 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS



DIM.	Unit	(mm)	Unit (inch)			
Dilvi.	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		
Е	25.40	-	1.000	-		

MARKING DIAGRAM



P/N = Specific Device Code G = Green Compound

YWW = Date Code F = Factory Code





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