

1A, 50V - 1000V 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 Part No. with suffix "H" means AEC-Q101 qualified Packing code with suffix "G" means green compound (halogen-free) **Terminal:** Pure tin plated leads, solderable per JESD22-B102 Meet JESD 201 class 2 whisker test **Weight:** 0.33 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)									
PARAMETER	SYMBOL	1 N	1 N	1 N	1 N	1 N	1 N	1 N	UNIT
		4001G	4002G	4003G	4004G	4005G	4006G	4007G	
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
Iaximum average forward rectified current I					А				
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	30					A		
Maximum instantaneous forward voltage (Note 1) @ 1 A	orward voltage (Note 1) V _F 1.0				V				
mum reverse current @ rated VR $T_J=25 \degree C$ I_R 5 $T_J=125 \degree C$ 100			μA						
Typical junction capacitance (Note 2)	CJ				10				pF
ypical thermal resistance R _{eJA}		80					°C/W		
Operating junction temperature range	TJ	- 55 to +150				°C			
Storage temperature range	T _{STG}	- 55 to +150					°C		

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

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







DO-204AL (DO-41)



IWAN MICONDUCTOR

1N4001G - 1N4007G

Taiwan Semiconductor

ORDERING INFORMATION						
PART NO.	PART NO.	PACKING CODE	PACKING CODE	PACKAGE	PACKING	
	SUFFIX		SUFFIX			
1N400xG (Note 1)		A0		DO-41	3,000 / Ammo box (52mm taping)	
	н	R0	G	DO-41	5,000 / 13" Paper reel	
		R1	9	DO-41	5,000 / 13" Paper reel (Reverse)	
		B0		DO-41	1,000 / Bulk packing	

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

EXAMPLE							
PREFERRED PART NO.	PART NO. PART NO. PACKING		PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION		
1N4007GHA0G	1N4007G	Н	A0	G	AEC-Q101 qualified Green compound		

30

25

20

15

10

5

0

1

PEAK FORWARD SURGE CURRENT(A)

RATINGS AND CHARACTERISTICS CURVES

(T_A =25°C unless otherwise noted)

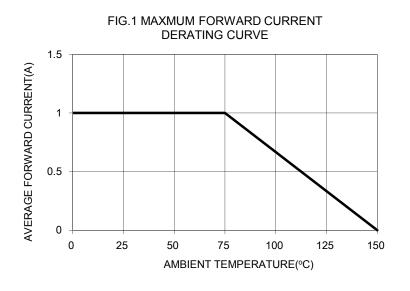


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

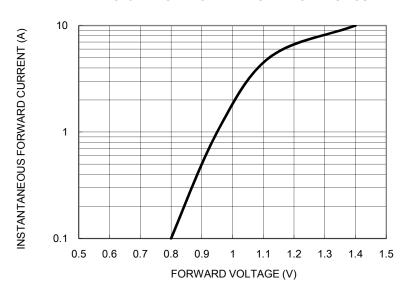


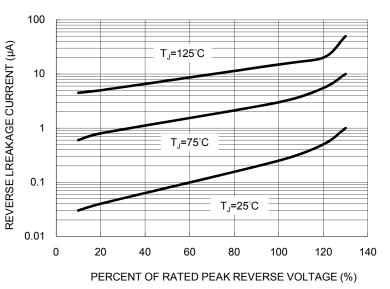
FIG. 4 TYPICAL REVERSE CHARACTERISTICS

NUMBER OF CYCLES AT 60 Hz

10

FIG. 2 MAXIMUM NON-REPETITIVE FORWARD

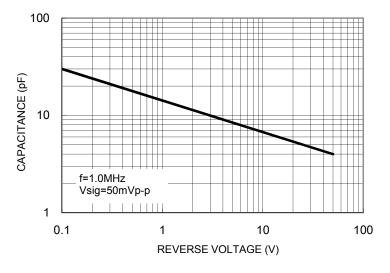
SURGE CURRENT



100

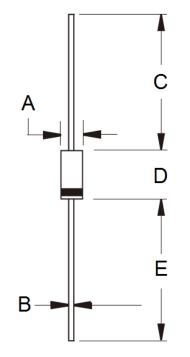


FIG. 5 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS





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

YWW = Date Code

G =

F =

Factory Code



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