

Glass Passivated Rectifiers

FEATURES

- Glass passivated chip junction
- High current capability, Low VF
- 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 definition



Case: R-6

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - green compound (halogen-free)

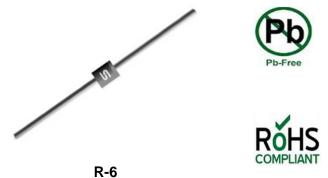
Base P/N with prefix "H" on packing code - AEC-Q101 qualified

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: 1.65 g (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHAR	ACTERSTI	CS (T _A =	25 ℃ ur	nless oth	nerwise	noted)			
PARAMETER	SYMBOL	6A	6A	6A	6A	6A	6A	6A	UNIT
PARAIVIETER		05G	10G	20G	40G	60G	80G	100G	
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)}	6						Α	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	250					Α		
Maximum instantaneous forward voltage (Note 1) @ 6 A	V _F	1	1.1 1.0				V		
Maximum reverse current @ rated VR T_J =25 $^{\circ}$ C T_J =125 $^{\circ}$ C	I _R	10 100			μΑ				
Typical junction capacitance (Note 2)	Cj	60			pF				
Typical thermal resistance	$R_{\theta jA}$	35						°C/W	
Operating junction temperature range	TJ	- 55 to +150				οС			
Storage temperature range	T _{STG}	- 55 to +150					οС		

Note 1: Pulse Test with PW=300 μ s, 1% Duty Cycle

Note 2: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.



ORDERING INFORMATION						
PART	AEC-Q101	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING	
NO.	QUALIFIED		CODE			
CA 0O		A0		R-6	700 / Ammo box	
6A0xG (Note 1)	Prefix "H"	R0	Suffix "G"	R-6	1,000 / 13" Paper reel	
(Note 1)		B0		R-6	400 / Bulk packing	

Note 1: "x" defines voltage from 50V (6A05G) to 1000V (6A100G)

EXAMPLE							
PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION		
6A05G A0	6A05G		A0				
6A05G A0G	6A05G		A0	G	Green compound		
6A05GHA0	6A05G	Н	A0		AEC-Q101 qualified		

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

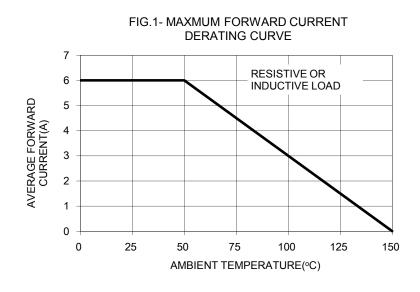


FIG. 2- TYPICAL REVERSE CHARACTERISTICS 100 INSTANTANEOUS REVERSE CURRENT
o (µA) TJ=125℃ 10 TJ=75°(TJ=25℃ 0.1 0.01 0 20 40 60 80 100 120 140 PERCENT OF RATED PEAK REVERSE VOLTAGE (%)

FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

300
250
150
100
1 10 100
NUMBER OF CYCLES AT 60 Hz

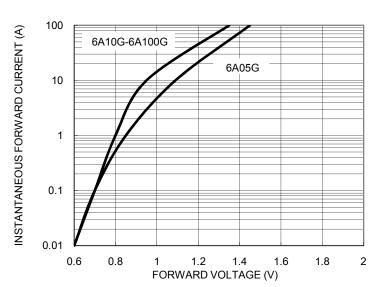


FIG. 4- TYPICAL FORWARD CHARACTERISTICS



FIG. 5- TYPICAL JUNCTION CAPACITANCE

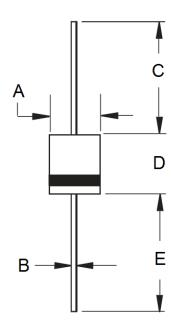
1000

1000

f=1.0MHz
Vslg=50mVp-p

10
REVERSE VOLTAGE (V)

PACKAGE OUTLINE DIMENSIONS



DIM.	Unit	(mm)	Unit (inch)		
DIW.	Min	Max	Min	Max	
Α	6.80	7.20	0.268	0.283	
В	1.20	1.30	0.047	0.051	
С	25.40	-	1.000	-	
D	8.60	9.10	0.339	0.358	
Е	25.40	_	1.000	-	

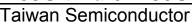
100

MARKING DIAGRAM



P/N = Specific Device Code G = Green Compound

YWW = Date Code F = Factory Code





Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied,to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or seling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.

Document Number: DS_D1405025 Version: E14

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Diodes - General Purpose, Power, Switching category:

Click to view products by Taiwan Semiconductor manufacturer:

Other Similar products are found below:

MCL4151-TR3 MMBD3004S-13-F RD0306T-H RD0506LS-SB-1H RGP30G-E373 DSE010-TR-E BAQ333-TR BAQ335-TR BAQ33-GS18 BAS1602VH6327XT BAV17-TR BAV19-TR BAV301-TR BAW27-TAP HSC285TRF-E NSVBAV23CLT1G NTE525 1SS181-TP 1SS184-TP 1SS193,LF 1SS193-TP 1SS400CST2RA SBAV99LT3G SDAA13 LL4448-GS18 SHN2D02FUTW1T1G LS4150GS18 LS4151GS08 SMMBD7000LT3G FC903-TR-E 1N4449 1N4934-E3/73 1SS226-TP APT100DL60HJ RFUH20TB3S RGP30G-E354 RGP30M-E3/73 D291S45T MCL4151-TR BAS 16-02V H6327 BAS 21U E6327 BAS 28 E6327 BAS33-TAP BAS 70-02V H6327 BAV300-TR BAV303-TR3 BAW27-TR BAW56DWQ-7-F BAW56M3T5G BAW75-TAP