

## **Glass Passivated Rectifiers**

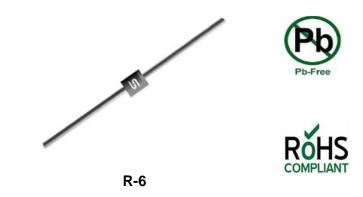
#### **FEATURES**

- 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

#### **MECHANICAL DATA**

#### 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 CHARACTERSTICS (T <sub>A</sub> =25°C unless otherwise noted)									
PARAMETER	SYMBOL	6A	6A	6A	6A	6A	6A	6A	UNIT
		05G	10G	20G	40G	60G	80G	100G	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>			6				Α	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>		250				A		
Maximum instantaneous forward voltage (Note 1) @ 6 A	V <sub>F</sub>	1	.1	1.0				V	
Maximum reverse current @ rated VR $T_J=25 \degree C$ $T_J=125 \degree C$	I <sub>R</sub>	10 100				μA			
Typical junction capacitance (Note 2)	Cj	60					pF		
Typical thermal resistance	R <sub>θjA</sub>	35				<sup>o</sup> C/W			
Operating junction temperature range	TJ	- 55 to +150				°C			
Storage temperature range	T <sub>STG</sub>	- 55 to +150					О <sup>О</sup>		

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

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



Taiwan Semiconductor

### ORDERING INFORMATION

PART	AEC-Q101	PACKING CODE	<b>GREEN COMPOUND</b>	PACKAGE	PACKING	
NO.	QUALIFIED		CODE			
6A0xG (Note 1)	Prefix "H"	A0		R-6	700 / Ammo box	
		R0	Suffix "G"	R-6	1,000 / 13" Paper reel	
		B0	1	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)

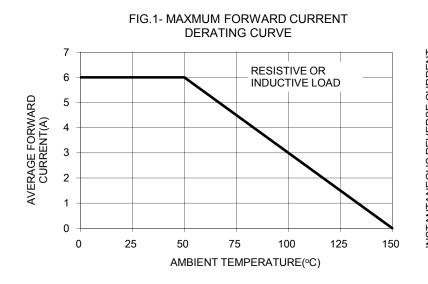
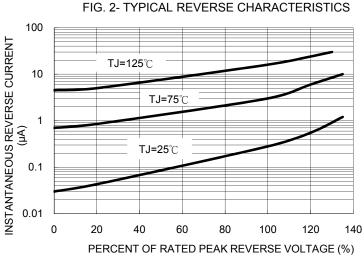
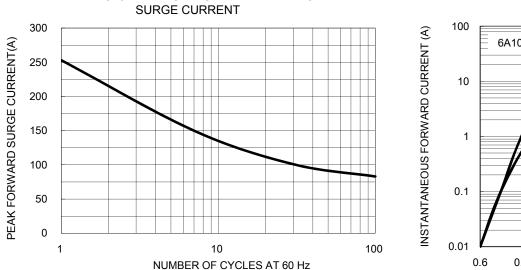
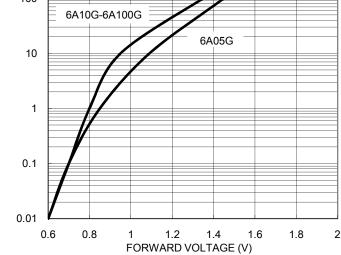


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD

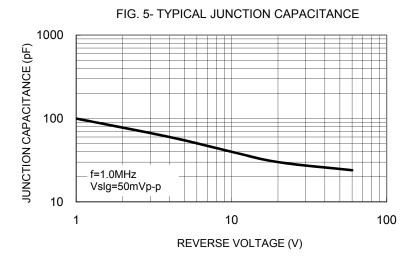


### FIG. 4- TYPICAL FORWARD CHARACTERISTICS

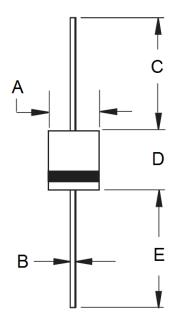








## PACKAGE OUTLINE DIMENSIONS



DIM.	Unit	(mm)	Unit (inch)			
	Min	Max	Min	Max		
А	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	-		

#### **MARKING DIAGRAM**



- Specific Device Code P/N =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.

# **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