

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 _A =25℃ unless otherwise noted)									
PARAMETER	SYMBOL	6A 05G	6A 10G	6A 20G	6A 40G	6A 60G	6A 80G	6A 100G	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)}	6							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	250							A
Maximum instantaneous forward voltage (Note 1) @ 6 A	V _F	1.1		1.0				V	
Maximum reverse current @ rated VR T _J =25 ℃ T _J =125 ℃	I _R	10 100							μA
Typical junction capacitance (Note 2)	C _j	60							pF
Typical thermal resistance	R _{θJA}	35							°C/W
Operating junction temperature range	T _J	- 55 to +150							°C
Storage temperature range	T _{STG}	- 55 to +150							°C

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.

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

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

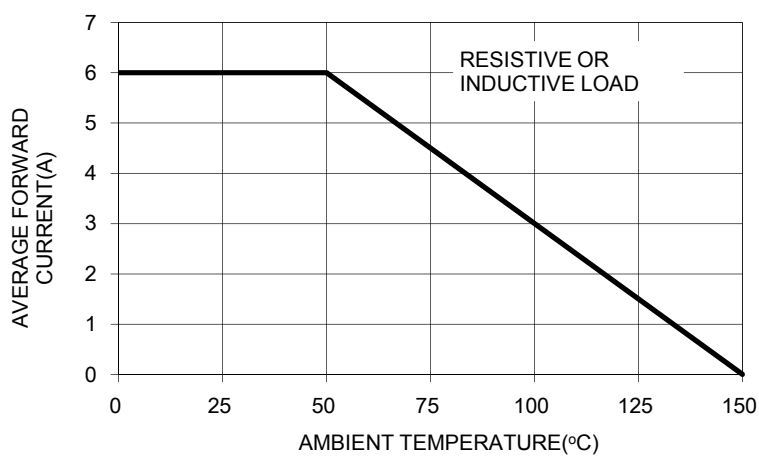


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

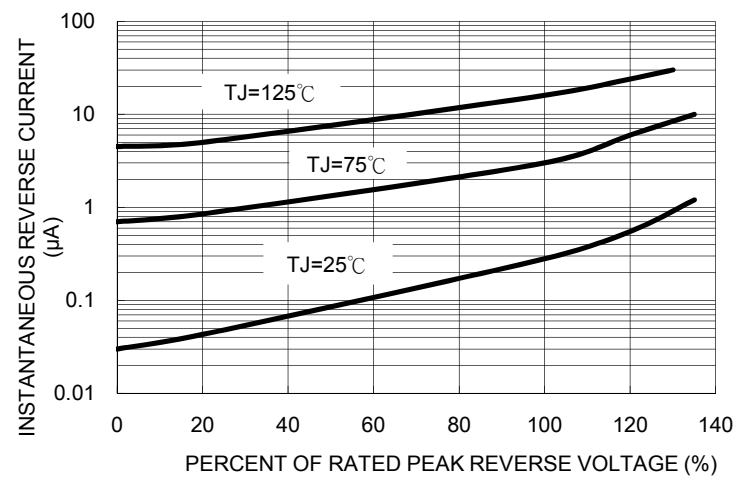


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



FIG. 4- TYPICAL FORWARD CHARACTERISTICS

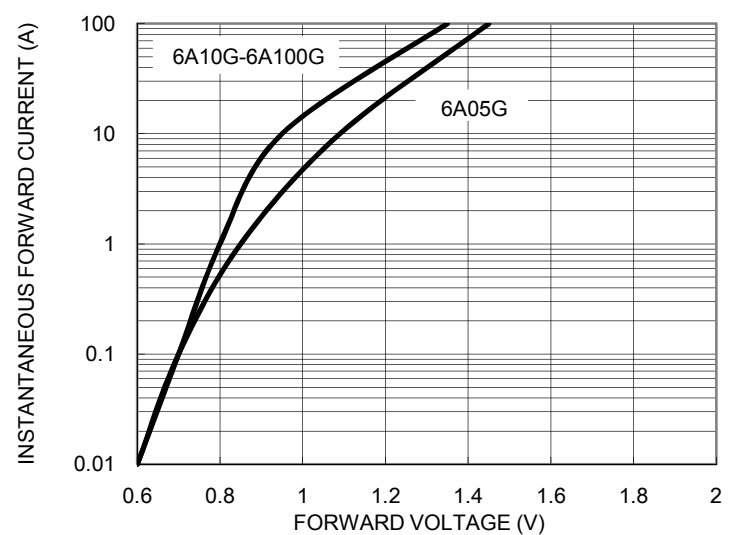
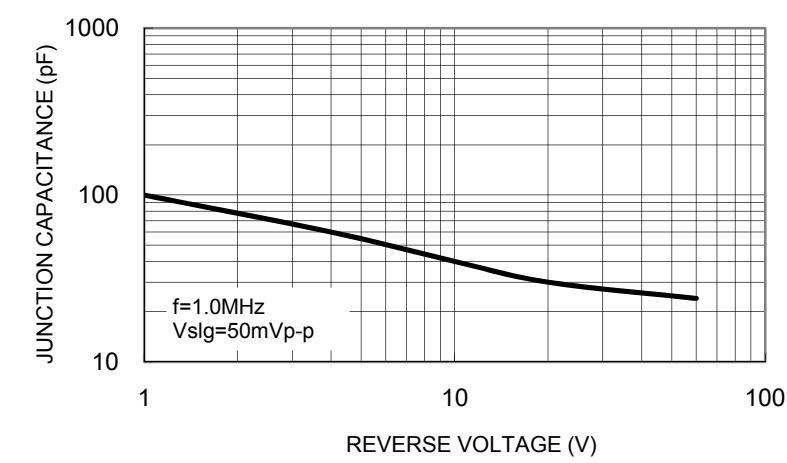
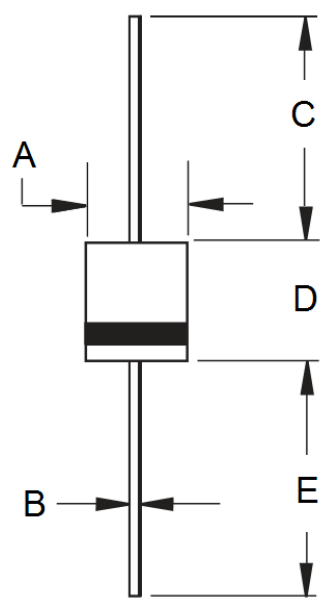


FIG. 5- TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	6.80	7.20	0.268	0.283
B	1.20	1.30	0.047	0.051
C	25.40	-	1.000	-
D	8.60	9.10	0.339	0.358
E	25.40	-	1.000	-

MARKING DIAGRAM



P/N =

Specific Device Code

G =

Green Compound

YWW =

Date Code

F =

Factory Code

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