

3A, 600V - 1000V Glass Passivated Rectifiers

FEATURES

- Glass passivated chip junction
- High efficiency, Low VF
- High current capability
- 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: DO-204AC (DO-15)

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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: 0.4g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)				
PARAMETER	SYMBOL	3A60	3A100	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	600	1000	V
Maximum RMS voltage	V_{RMS}	420	700	V
Maximum DC blocking voltage	V_{DC}	600	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	3		A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	120		A
Maximum instantaneous forward voltage (Note 1) @ 3 A	V_F	1.1		V
Maximum reverse current @ rated V_R	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	I_R	5	μA
Typical junction capacitance (Note 2)			100	
Typical thermal resistance	$R_{\theta JL}$ $R_{\theta JA}$	17 52		$^\circ\text{C/W}$
Operating junction temperature range	T_J	- 55 to +150		$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 to +150		$^\circ\text{C}$

Note 1: Pulse test with $PW=300\ \mu\text{s}$, 1% duty cycle

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

ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
3Axx (Note 1)	H	A0	G	DO-15	1,500 / Ammo box
		R0		DO-15	3,500 / 13" Paper reel
		B0		DO-15	1,000 / Bulk packing

Note 1: "x" defines voltage from 600V (3A60) to 1000V (3A100)

EXAMPLE					
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
3A60HA0G	3A60	H	A0	G	AEC-Q101 qualified Green compound

RATINGS AND CHARACTERISTICS CURVES

($T_A=25^\circ\text{C}$ unless otherwise noted)

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

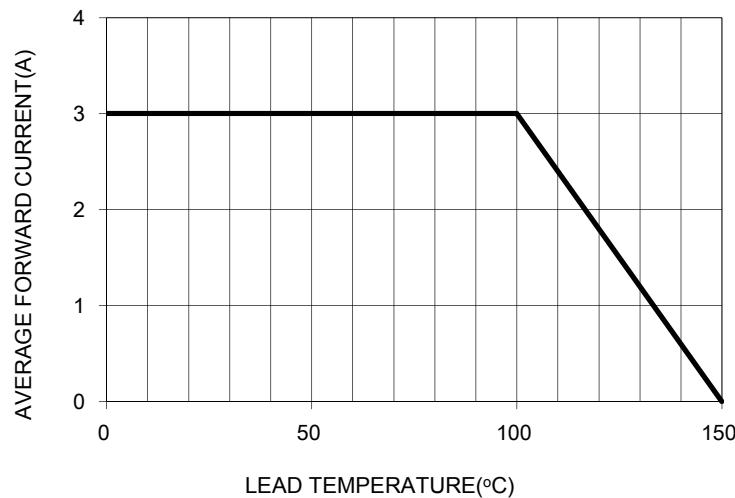


FIG. 2 MAXIMUM FORWARD SURGE CURRENT

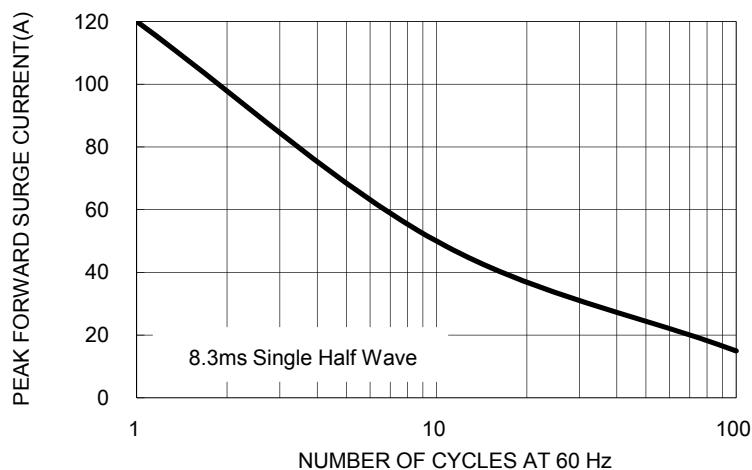


Fig. 3 TYPICAL FORWARD CHARACTERISTICS

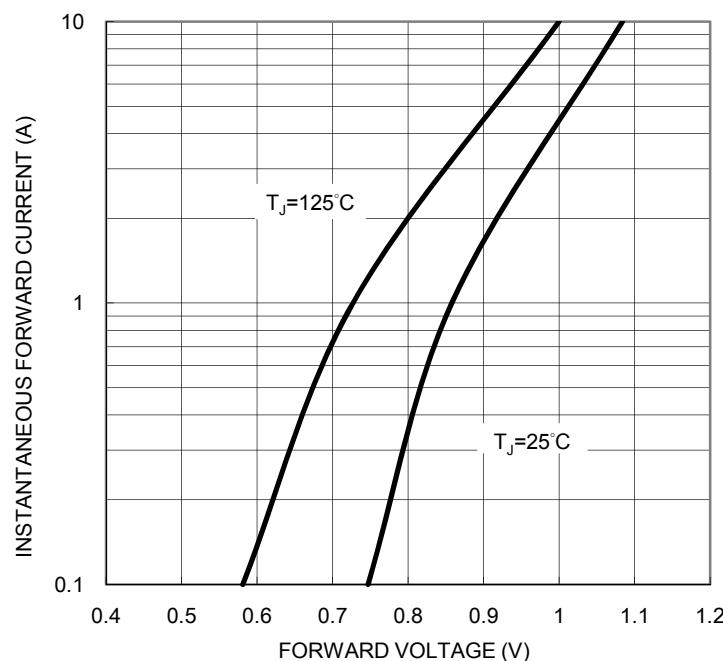


FIG. 4 MAXIMUM REVERSE LEAKAGE CHARACTERISTICS

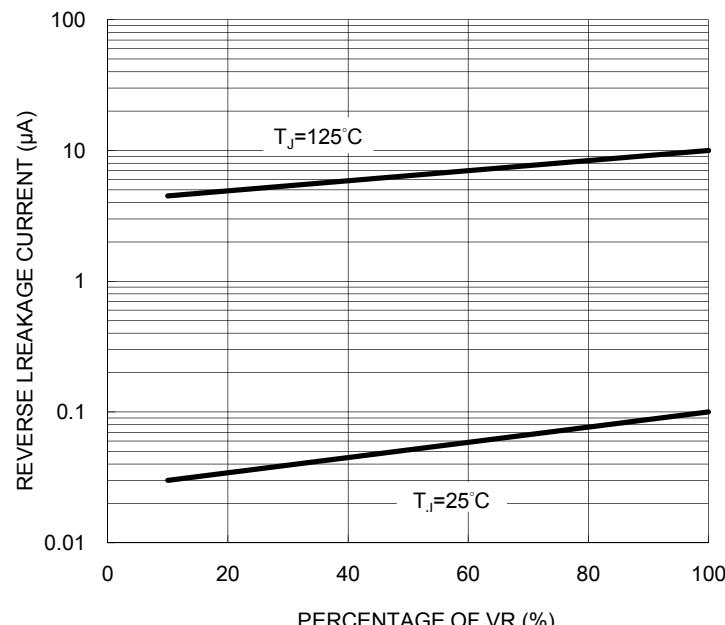
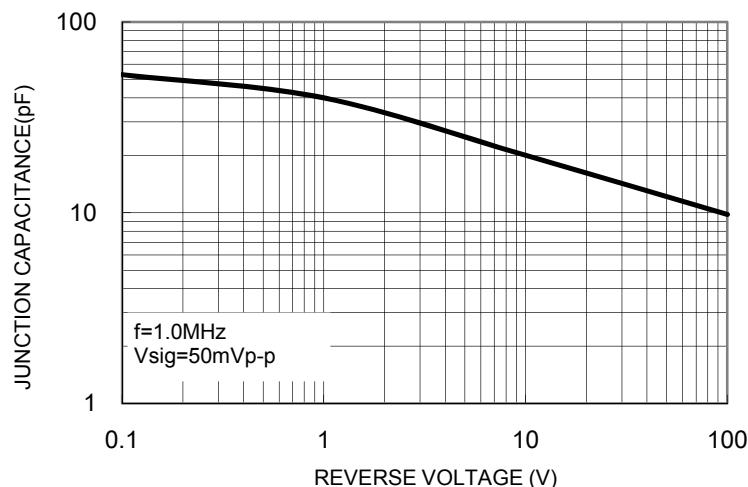
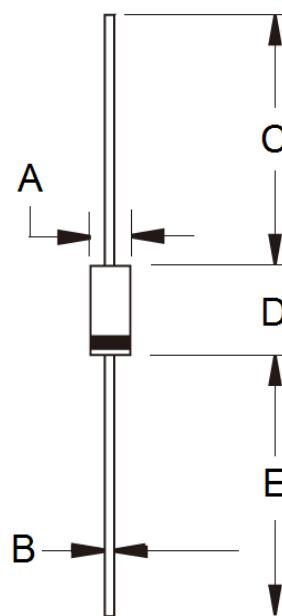


FIG. 5 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS

DO-204AC (DO-15)



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.60	3.60	0.102	0.142
B	0.70	0.90	0.028	0.035
C	25.40	-	1.000	-
D	5.80	7.60	0.228	0.299
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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