

## 4A, 200V - 600V Ultrafast Glass Passivated Rectifiers

### FEATURES

- Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
- Ultrafast recovery time for high efficiency
- Excellent high temperature switching
- Glass passivated junction
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



DO-201AD

### MECHANICAL DATA

**Case:** DO-201AD

Molding compound, UL flammability classification rating 94V-0

Packing code with suffix "G" means green compound (halogen-free)

Packing code with suffix "H" means AEC-Q101 qualified

**Terminal:** Matte tin plated leads, solderable per J-STD-002

Meet JESD 201 class 2 whisker test,

**Weight:** 1.2 g (approximately)

<b>MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS</b> ( $T_A=25^\circ\text{C}$ unless otherwise noted)					
PARAMETER	SYMBOL	MUR4L20	MUR4L40	MUR4L60	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	V
Maximum RMS voltage	$V_{RMS}$	140	280	420	V
Maximum DC blocking voltage	$V_{DC}$	200	400	600	V
Maximum average forward rectified current	$I_{F(AV)}$	4			A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	125			A
Maximum instantaneous forward voltage (Note 1) @ 4 A	$V_F$	0.89	1.28		V
Maximum reverse current @ rated VR $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	$I_R$	5 150	10 250		$\mu\text{A}$
Maximum reverse recovery time (Note 2)	$t_{rr}$	25	50		ns
Typical junction capacitance (Note 3)	$C_J$	65			pF
Typical thermal resistance	$R_{\theta JA}$	42			$^\circ\text{C/W}$
	$R_{\theta JL}$	15			$^\circ\text{C/W}$
Operating junction temperature range	$T_J$	- 55 to +175			$^\circ\text{C}$
Storage temperature range	$T_{STG}$	- 55 to +175			$^\circ\text{C}$

Note 1: Pulse Test with  $PW=300\mu\text{s}$ , 1% Duty Cycle

Note 2: Reverse Recovery Test Conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{RR}=0.25\text{A}$

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

ORDERING INFORMATION					
PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
MUR4LX0 (Note 1)	H	A0	G	DO-201AD	500 / Ammo box
		R0			1,250 / 13" paper reel
		B0			500 / Bulk packing
		X0			Forming

Note 1: "x" defines voltage from 200V (MUR4L20) to 600V (MUR4L60)

EXAMPLE					
EXAMPLE PART NO.	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE	DESCRIPTION
MUR4L60HA0G	MUR4L60	H	A0	G	AEC-Q101 qualified Green compound

**RATINGS AND CHARACTERISTICS CURVES**

(T<sub>A</sub>=25°C unless otherwise noted)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

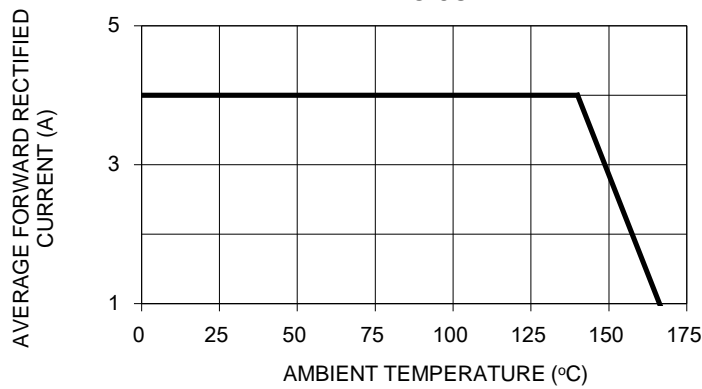


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

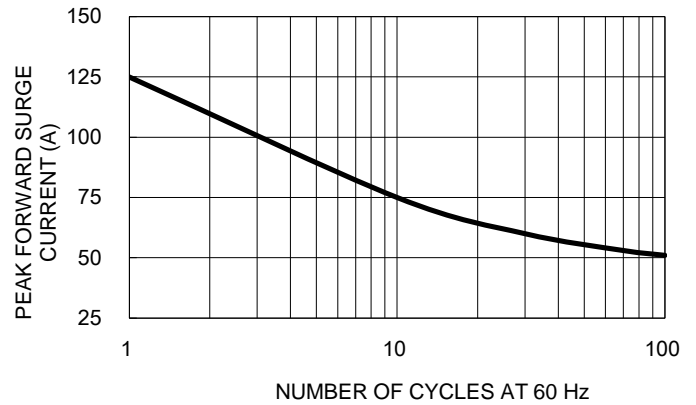


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

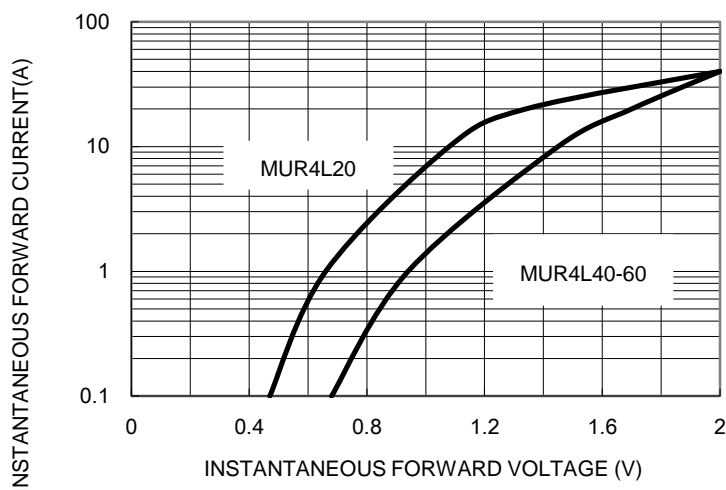


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

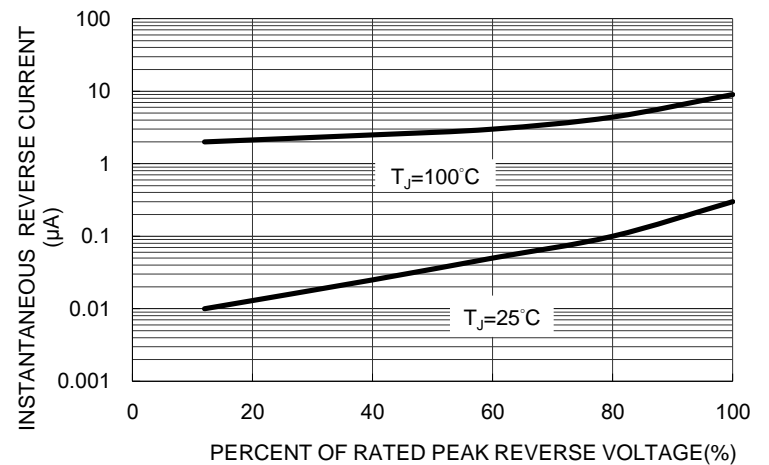
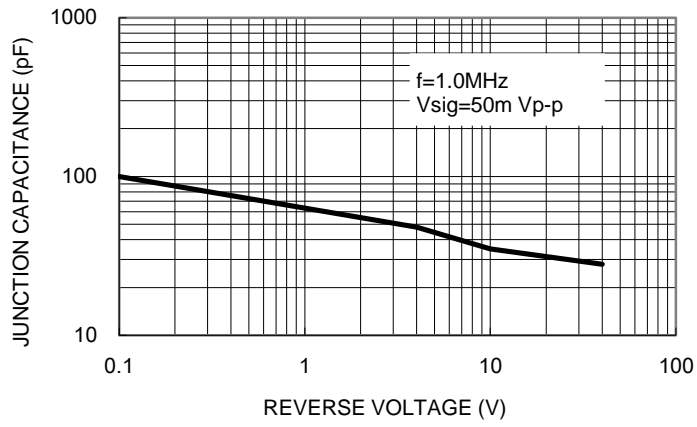
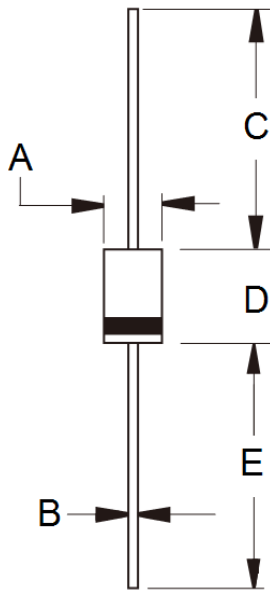


FIG. 5 TYPICAL JUNCTION CAPACITANCE



**PACKAGE OUTLINE DIMENSIONS**

DO-201AD



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	5.00	5.60	0.197	0.220
B	1.20	1.30	0.048	0.052
C	25.40	-	1.000	-
D	8.50	9.50	0.335	0.375
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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