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
- AEC-Q101 qualified

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)

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

Weight: 1.2 g (approximately)

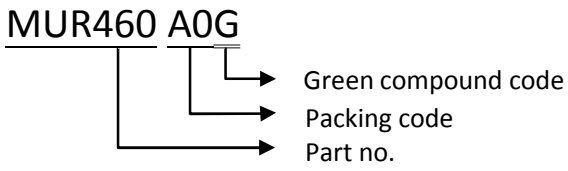
MAXIMUM RATINGS AND ELECTRICAL CHARACTERSTICS (T_A=25°C unless otherwise noted)					
PARAMETER	SYMBOL	MUR420	MUR440	MUR460	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	V
Maximum RMS voltage	V_{RMS}	140	280	420	V
Maximum DC blocking voltage	V_{DC}	200	400	600	V
Maximum average forward 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 °C T_J=125 °C	I_R	5 150	10 250		μA
Maximum reverse recovery time (Note 2)	t_{rr}	25	50		ns
Typical junction capacitance (Note 3)	C_J	65			pF
Typical thermal resistance	$R_{\theta JA}$	28			°C/W
Operating junction temperature range	T_J	- 55 to +175			°C
Storage temperature range	T_{STG}	- 55 to +175			°C

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

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

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

ORDER INFORMATION (EXAMPLE)



RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

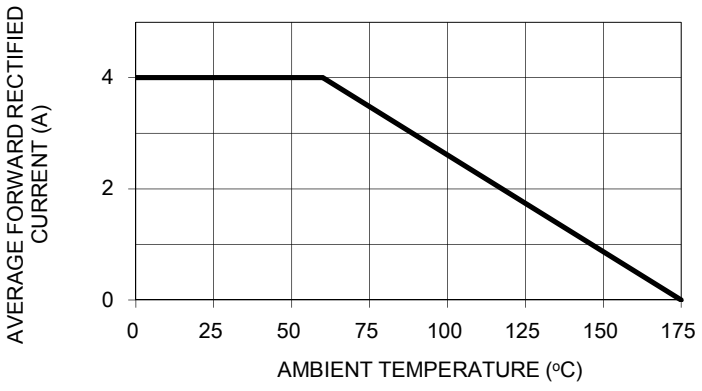


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

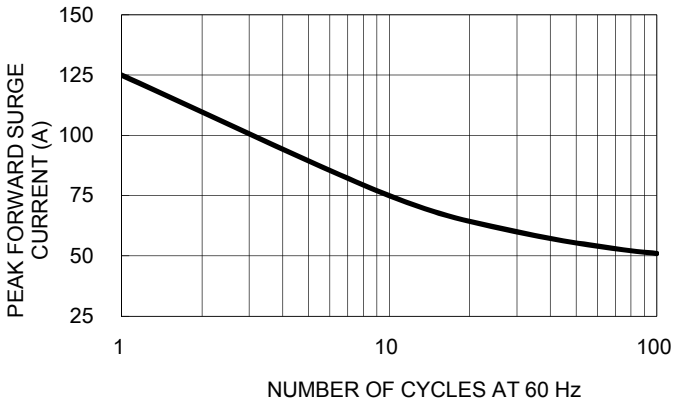


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERSTICS

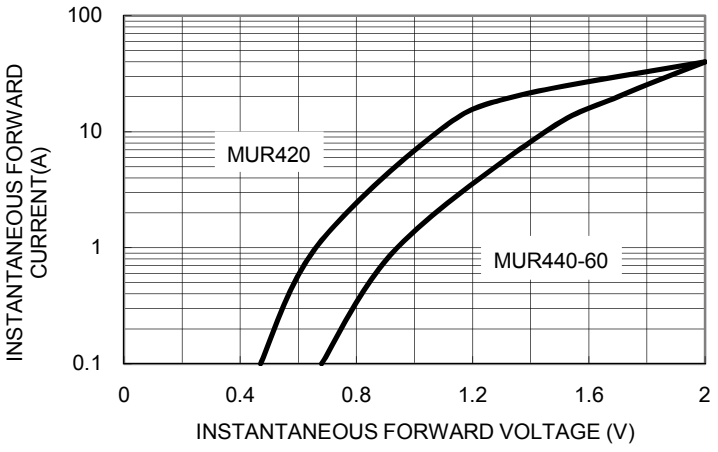


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

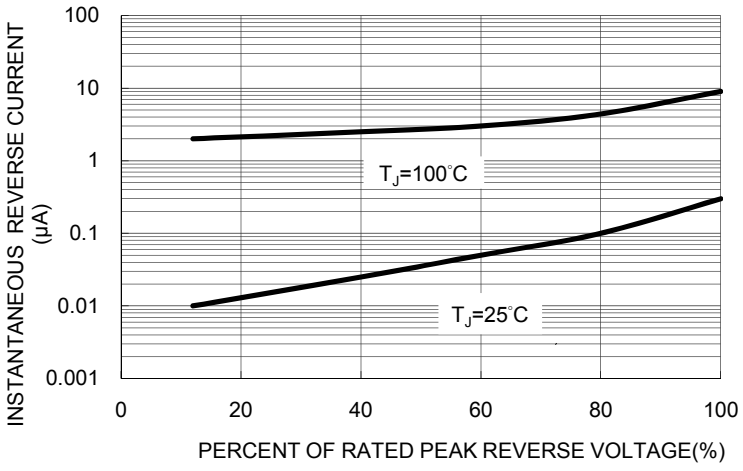


FIG. 5 TYPICAL JUNCTION CAPACITANCE

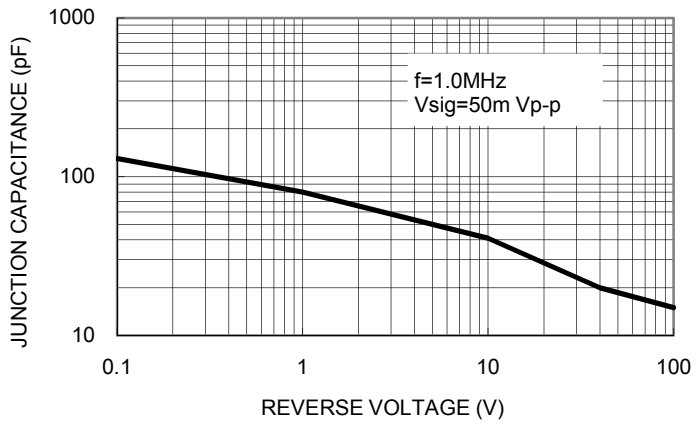
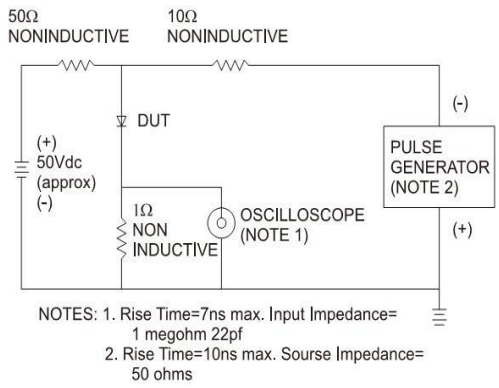
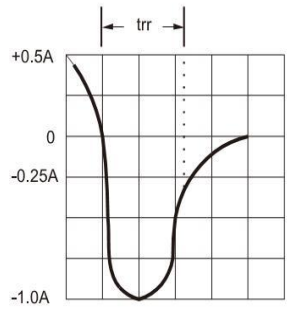


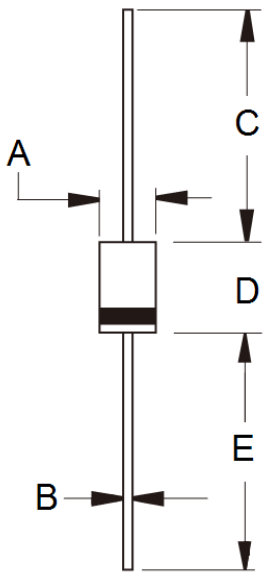
FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





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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