

## Ultra Fast Rectifiers Diode in DO-201AD

### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

### Mechanical Data

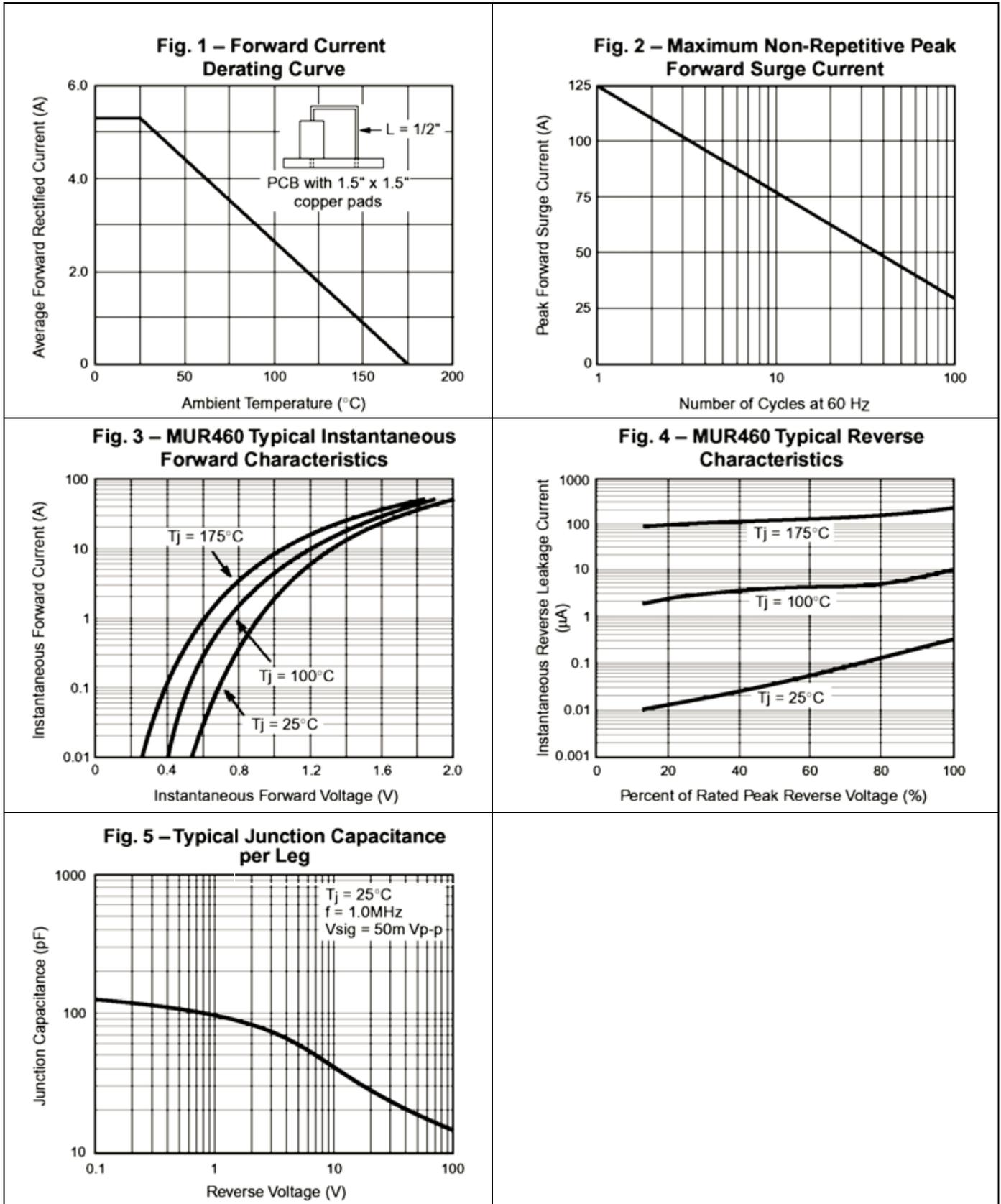
- **Case:** JEDEC DO-204AC(DO-201AD)molded plastic  
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals



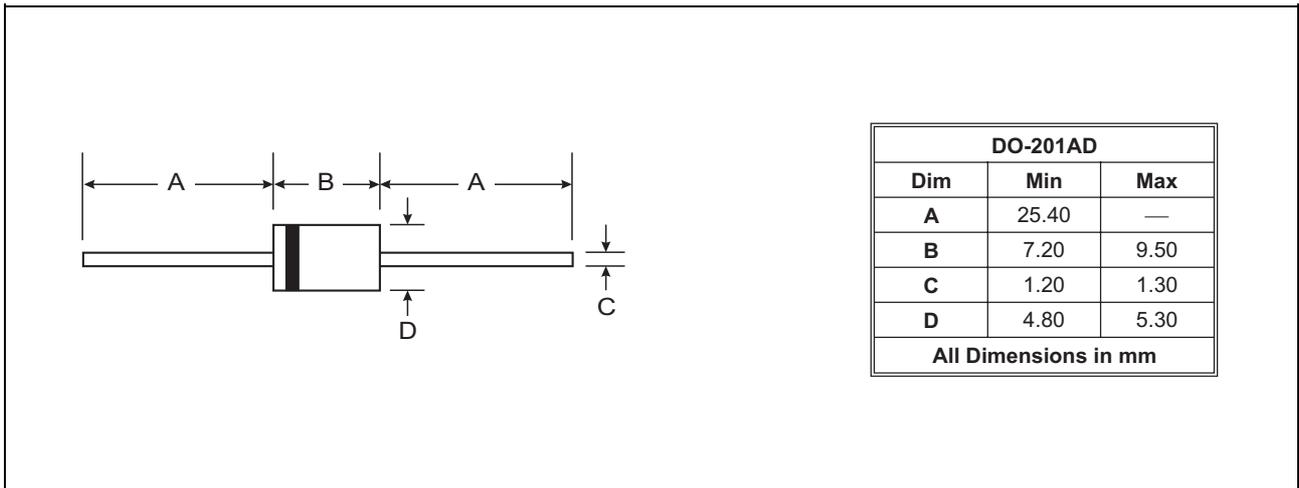
Maximum Ratings and Electrical Characteristics				
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%				
Parameter	Symbol	MUR440	MUR460	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	400	600	V
Working peak reverse voltage	$V_{RMS}$	400	600	V
Maximum DC blocking voltage	$V_{DC}$	400	600	V
Maximum average forward rectified current (See Fig.1)	$I_{F(AV)}$	4.0		A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	100.0		A
Max. instantaneous forward voltage (Note 1)	$V_F$	at 3.0A $T_J=150^{\circ}C$	1.05	V
		at 3.0A $T_J=25^{\circ}C$	1.25	
		at 4.0A $T_J=25^{\circ}C$	1.28	
Maximum instantaneous reverse current at rated DC blocking voltage (Note 1)	$I_R$	@T = 25°C	10.0	μA
		@T = 150°C	250	
Maximum reverse recovery time at $I_F=0.5A$ , $I_R=1.0A$ , $I_{tr}=0.25A$	$t_{rr}$	50		ns
Maximum reverse recovery time at $I_F=1.0A$ , $di/dt=50A/us$ , $V_R=30V$ , $I_{tr}=10\% I_{RM}$	$t_{rr}$	75		ns
Maximum forward recovery time at $I_F=1.0A$ , $di/dt=100A/us$ , recovery to 1.0V	$t_{fr}$	50		ns
Typical thermal resistance junction to ambient (Note 2)	$R_{\theta JA}$	28		°C/W
Operating junction temperature range	$T_J$	-55 to +175		°C
Storage temperature range	$T_{STG}$	-55 to +150		°C

- Notes:** 1. Pulse test:  $t_p=300us$ , duty cycle < 2%  
2. Lead length = 1/2" on P.C. Board with 1.5" x 1.5" copper surface

**Typical Characteristics** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$  unless otherwise specified)



## Package Dimensions



## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
MUR440 thur MUR460	DO-201AD	Tape and BOX	1250pcs / reel	EIA STD RS-481

## Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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