

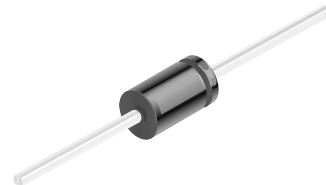
Ultra Fast Rectifiers Diode in DO-201AD

Features

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

Mechanical Data

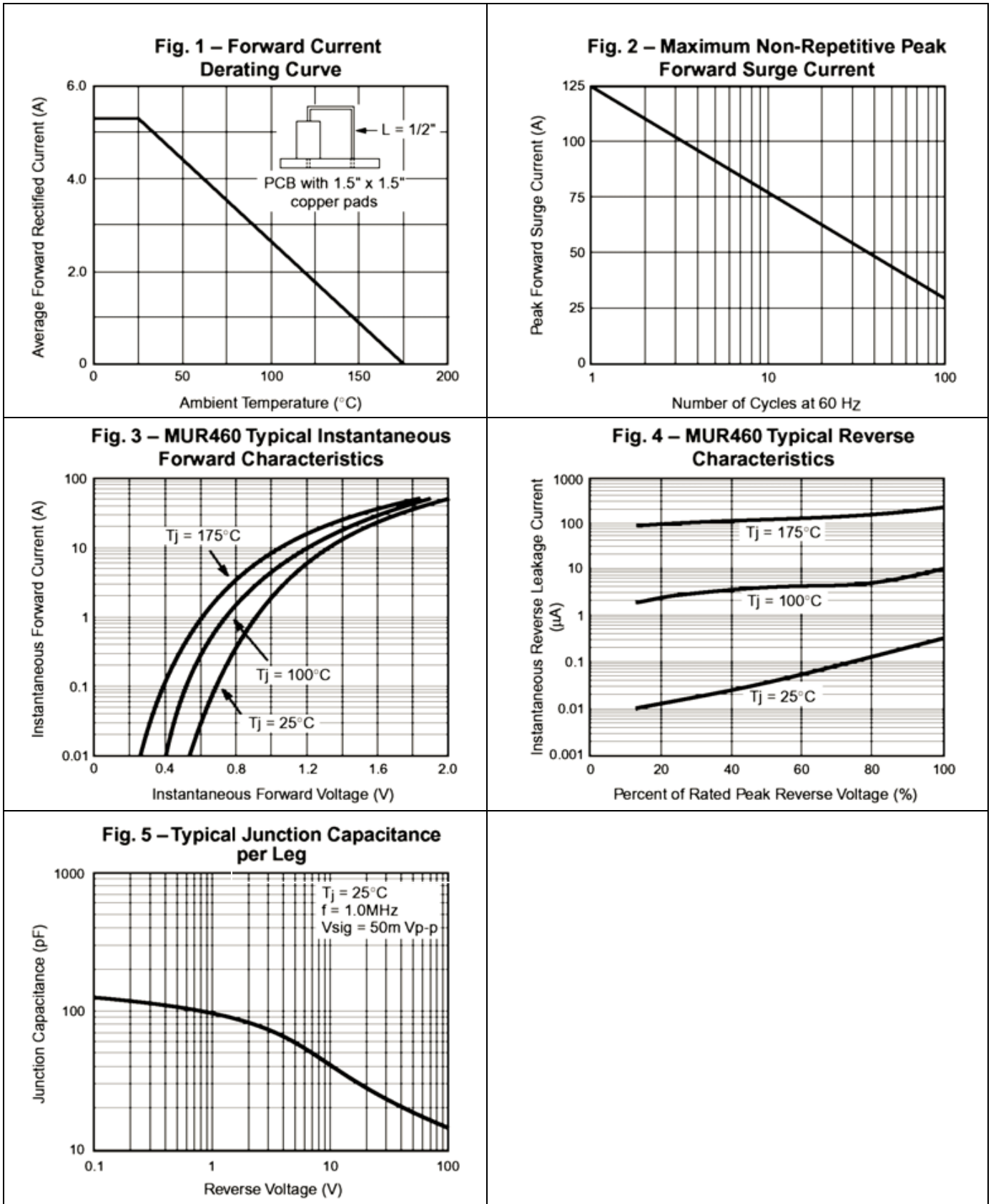
- **Case:** JEDEC DO-204AC(DO-201AD)molded plastic
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals



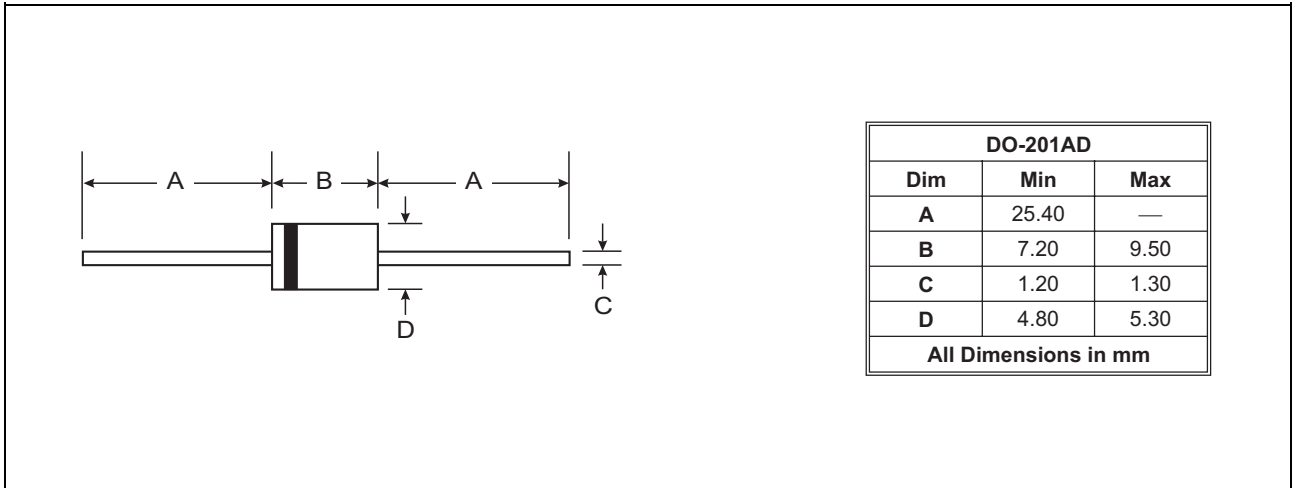
Maximum Ratings and Electrical Characteristics				
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%				
Parameter	Symbol	MUR440	MUR460	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	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 $T_J=150^\circ\text{C}$	1.05	V
		at 3.0A $T_J=25^\circ\text{C}$	1.25	
		at 4.0A $T_J=25^\circ\text{C}$	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 $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{tr}=0.25\text{A}$	t_{rr}	50		ns
Maximum reverse recovery time at $I_F=1.0\text{A}$, $di/dt=50\text{A}/\mu\text{s}$, $V_R=30\text{V}$, $I_{tr}=10\% I_{RM}$	t_{rr}	75		ns
Maximum forward recovery time at $I_F=1.0\text{A}$, $di/dt=100\text{A}/\mu\text{s}$, 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: $t_p=300\mu\text{s}$, duty cycle < 2%
2. Lead length = 1/2" on P.C. Board with 1.5" x 1.5" copper surface

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



Package Dimensions



Ordering information

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

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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