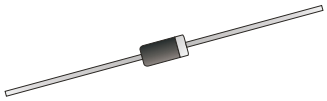
Ultra Fast Recovery Rectifier

SMD Diodes Specialist

MUR440-G Thru. MUR460-G

Voltage: 400 to 600 V
Current: 4.0 A
RoHS Device



Features

-Fast switching for high efficiency.

-Low forward voltage drop.

-High current capability.

-Low reverse leakage current.

-High surge current capability.

Mechanical data

-Case: Molded plastic, DO-201AD

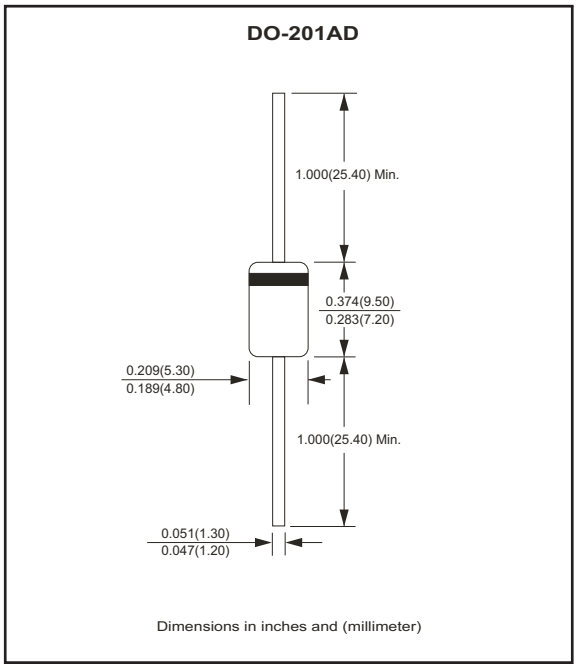
-Epoxy: UL 94V-0 rate flame retardant

-Terminals: Solderable per MIL-STD-202, method 208

-Polarity: Color band denotes cathode

-Mounting position: Any

-Weight: 1.1 grams



Electrical Characteristics (at T_A=25°C unless otherwise noted)

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-G	MUR460-G	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	400	600	V
Maximum peak reverse voltage	V_{RWM}	280	420	V
Maximum DC blocking voltage	V_{DC}	400	600	V
Maximum average forward rectified current T_A=75°C	$I_{(AV)}$	4.0		A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150		A
Maximum instantaneous @ 4.0A Forward voltage @ 3.0A	V_F	1.28 1.25		V
Maximum DC reverse current T_A=25°C At rated DC blocking voltage T_A=150°C	I_R	5.0 250		μA
Maximum reverse recovery time at I_F=0.5A , I_R=1.0A , Irr=0.25A	Trr	50		nS
Operating junction and Storage temperature range	Tj,T_{STG}	-55 to +175		°C

NOTES:
1. Pulse test : tp=300us,duty cycle<2%.
2. Lead length=1/2" on P.C. board with 1.5" x 1.5" copper surface.

RATING AND CHARACTERISTIC CURVES (MUR440-G Thru. MUR460-G)

Fig.1 Forward Current Derating Curve

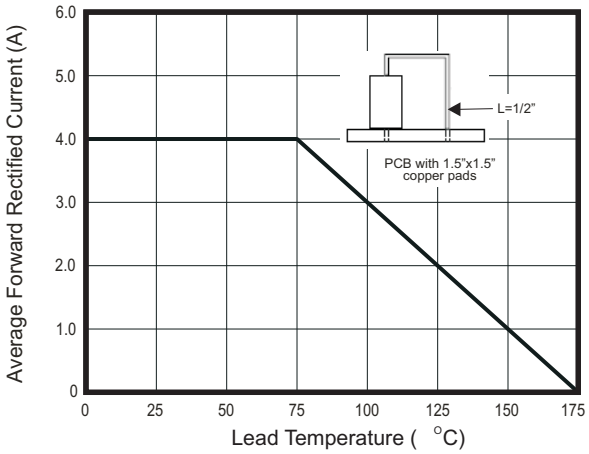


Fig.2 Maximum Non-repetitive Peak Forward Surge Current

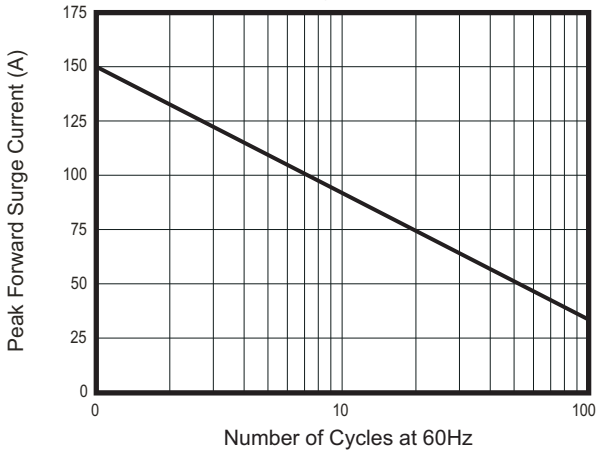


Fig.3 Typical Instantaneous Forward Characteristics

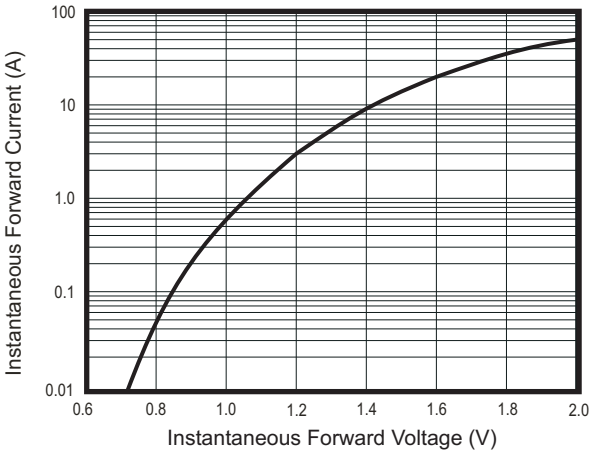


Fig.4 Typical Reverse Characteristics

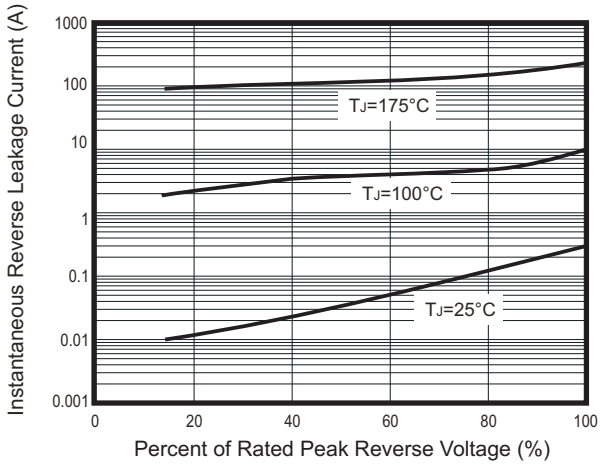


Fig.5 Typical Junction Capacitance per leg