



MUR440AX ULTRAFAST RECTIFIERS

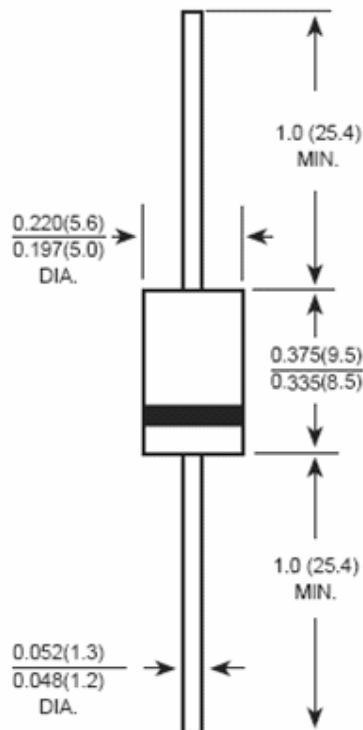
Applications:

- Switching Power Supply
- Power Switching Circuits
- General Purpose

Features:

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Low Power Loss
- Super Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Dimensions: In Inches / mm

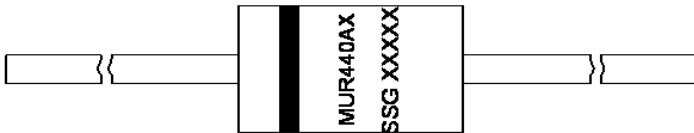


DO-201AD



Marking Diagram:

Where XXXXX is YYWWL



MUR = Device Type
4 = Forward Current (4A)
40 = Reverse Voltage (400V)
AX = Configuration
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions : Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
MUR440AX	DO-201AD (Pb-Free)	1250pcs / tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Repetitive Peak Inverse Voltage	V_{RWM}	-	400	V
Average Forward Current	$I_{F(AV)}$	50% duty cycle @TC =105°C rectangular wave form	4.0	A
One Cycle Non-Repetitive Surge Forward Current	I_{FSM}	8.3ms, Half Sine pulse	125	A



Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop*	V_F	@ $I_F=4A$, Pulse, $T_J = 25\text{ }^\circ\text{C}$	1.3	V
Reverse Current*	I_{R1}	@ $V_R = \text{rated VR}$ $T_J = 25\text{ }^\circ\text{C}$	5	μA
	I_{R2}	@ $V_R = \text{rated VR}$ $T_J = 100\text{ }^\circ\text{C}$	500	μA
Junction Capacitance	C_T	@ $V_R = 5V$, $T_C = 25\text{ }^\circ\text{C}$ $f_{\text{SIG}} = 1\text{MHz}$	80	pF
Reverse Recovery Time	t_{rr}	$I_F=0.5A$, $I_R=1A$, and $I_{RR}=0.25A$	35	ns

* Pulse width < 300 μs , duty cycle < 2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T_J	-	-55 to +150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-	-55 to +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta\text{JC}}$	DC operation	8	$^\circ\text{C/W}$
Approximate Weight	wt	-	1.02	g
Case Style	DO-201AD			

*1 Alumina Substrate Mounted (Soldering Lands=2x3.5mm, Both Sides)

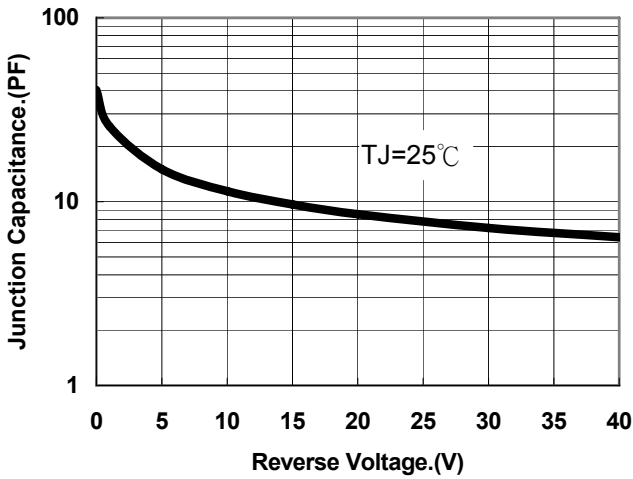


Fig.1-Typical Junction Capacitance

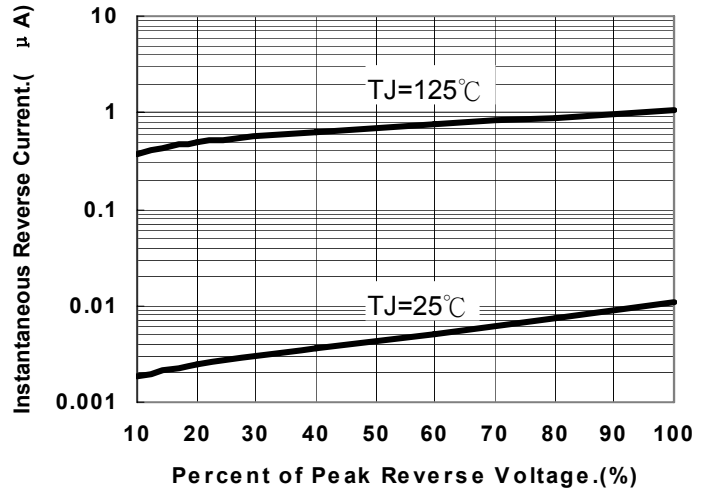


Fig.2-Typical Reverse Characteristics

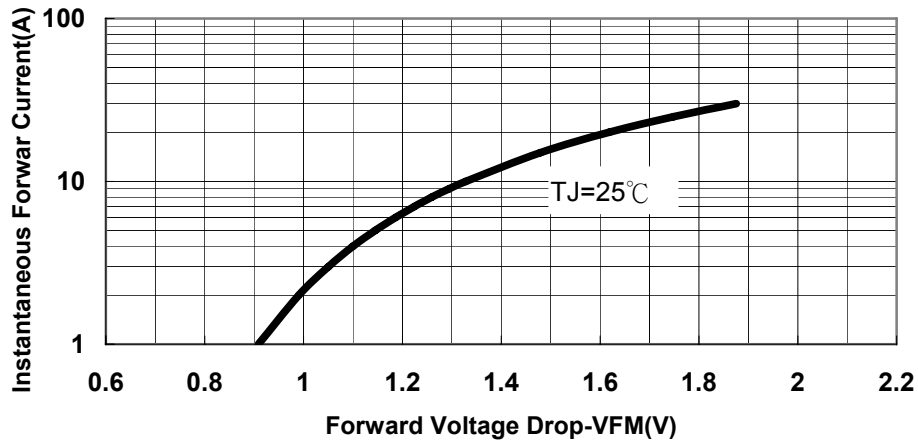


Fig.3-Typical Instantaneous Forward Voltage Characteristics



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