

MUR540AX ULTRAFAST PLASTIC RECTIFIER

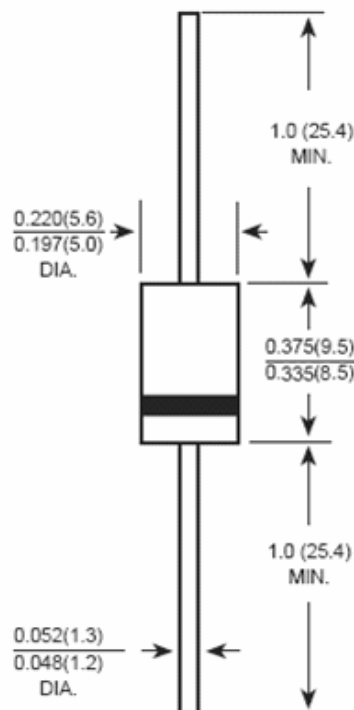
Applications:

- 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-O
- 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

Technical Data
Data Sheet N0270, Rev. -

Marking Diagram:

Where XXXXX is YYWWL



- MUR = Device Type
- 5 = Forward Current (5A)
- 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
MUR540AX	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
Peak Inverse Voltage	V_{RWM}	-	400	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle @TC =105°C rectangular wave form	5.0	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	50Hz, Half Sine wave	80	A

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_F	@ $I_F = 5A$, Pulse, $T_J = 25^\circ C$	1.25	V
Max. Reverse Current	I_{R1}	@ $V_R = \text{rated VR}$ $T_J = 25^\circ C$	10	μA
	I_{R2}	@ $V_R = \text{rated VR}$ $T_J = 125^\circ C$	500	μA
Max. Reverse Recovery Time	t_{rr}	$I_F = 500mA$, $I_R = 1A$, and $I_m = 250mA$	50	ns

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

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +150	$^\circ C$
Max. Storage Temperature	T_{stg}	-	-55 to +150	$^\circ C$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	-	3.5	$^\circ C / W$
Approximate Weight	wt	-	1.02	g
Case Style	DO-201AD			

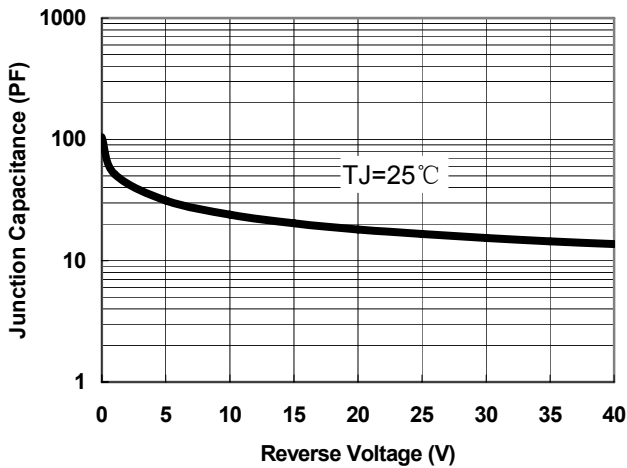


Fig.1-Typical Junction Capacitance

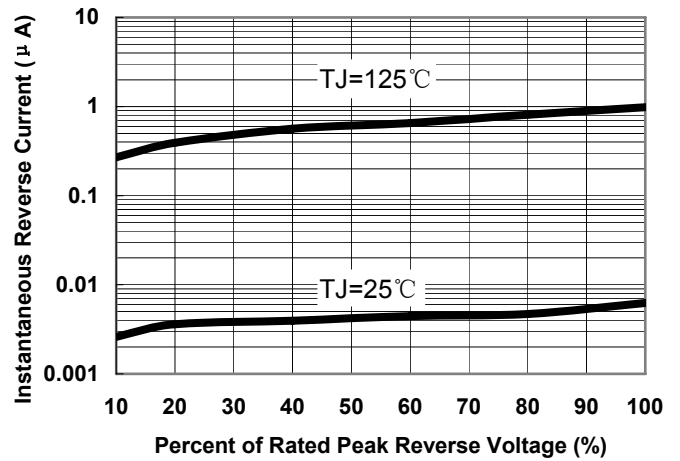


Fig.2-Typical Reverse Characteristics

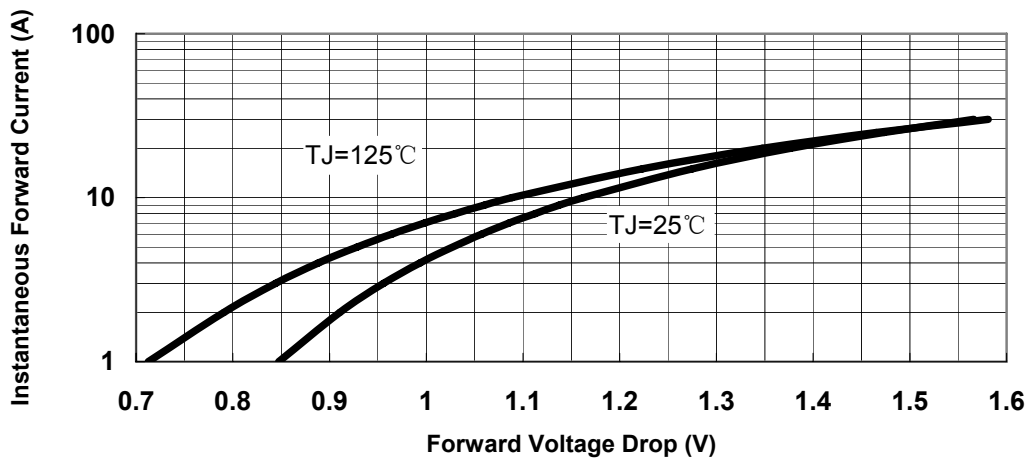


Fig.3-Typical Instantaneous Forward Voltage Characteristics

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