Technical Data
Data Sheet N0270, Rev. -

Green Products

MUR540AX ULTRAFAST PLASTIC RECTIFIER

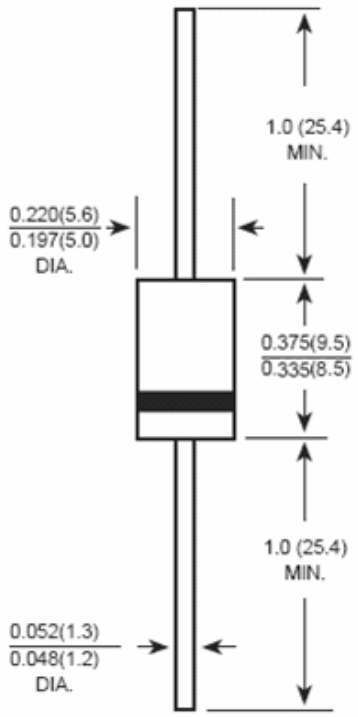
Applications:

- **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

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MUR540AX

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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℃ rectangular wave form	5.0	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	50Hz, Half Sine wave	80	A

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Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_F	@ I_F= 5A, Pulse, T_J = 25℃	1.25	V
Max. Reverse Current	I_{R1}	@V_R = rated VR T_J = 25℃	10	μA
	I_{R2}	@V_R = rated VR T_J = 125℃	500	μA
Max. Reverse Recovery Time	t_{rr}	I_F=500mA, I_R=1A,and I_{rm}=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	℃
Max. Storage Temperature	T_{stg}	-	-55 to +150	℃
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	-	3.5	℃ /W
Approximate Weight	wt	-	1.02	g
Case Style	DO-201AD			

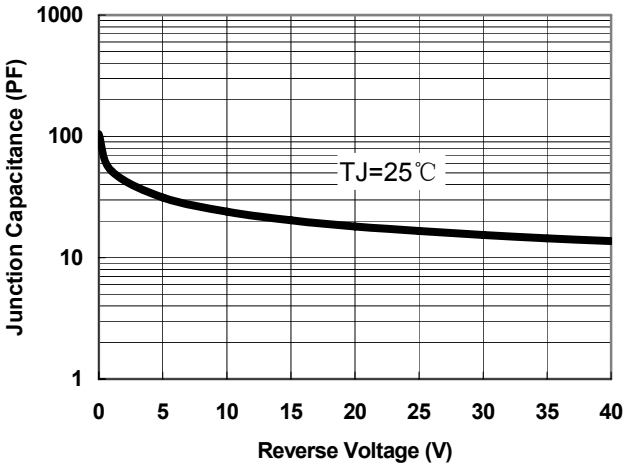

Fig.1-Typical Junction Capacitance

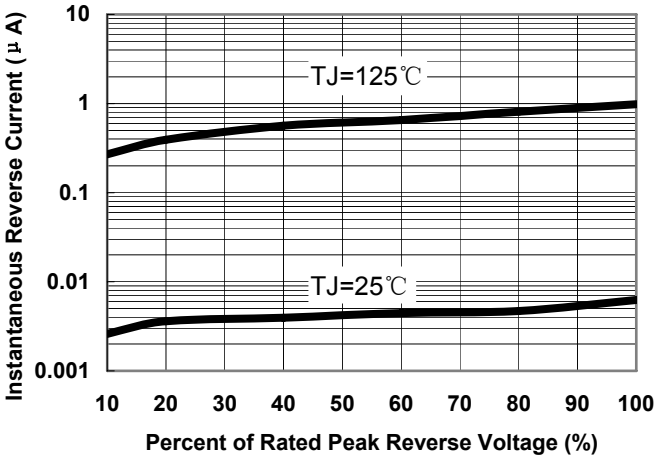

Fig.2-Typical Reverse Characteristics

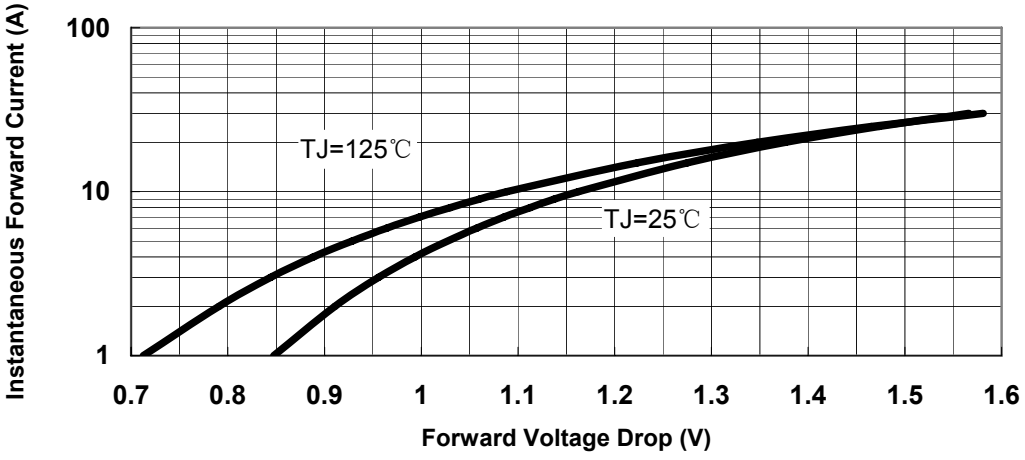

Fig.3-Typical Instantaneous Forward Voltage Characteristics

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