# **Ultra Fast Rectifier**

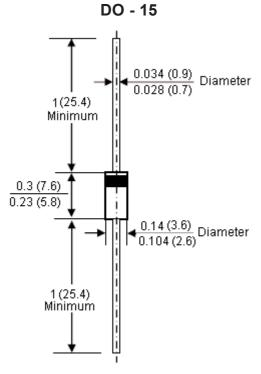




#### Features:

- · Diffused junction.
- Ultra fast switching for high efficiency.
- Low reverse leakage current.
- · Low forward voltage drop.
- High current capability.

Reverse Voltage - 50 V Forward Current - 2 Amperes



Dimensions : Inches (Millimetres)

## **Mechanical Data**

Case : JEDEC DO-15 moulded plastic.
Polarity : Colour band denotes cathode.

Weight : 0.015 oz, 0.4 g.

Mounting position : Any.

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# **Ultra Fast Rectifier**



## **Maximum Ratings and Electrical Characteristics**

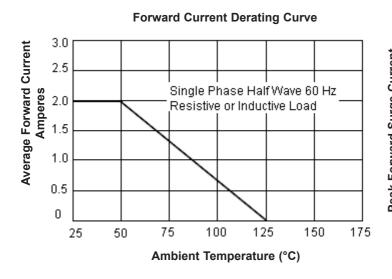
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristics	Symbol	UF2001	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	
Maximum Average Forward  Rectified Current at T <sub>A</sub> = 55°C	I (AV)	2	А
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	60	
Peak Forward Voltage at 2 A dc (Note1)	V <sub>F</sub>	1	V
Maximum DC Reverse Current at $T_J = 25^{\circ}$ C Rated DC Blocking Voltage at $T_J = 100^{\circ}$ C	I <sub>R</sub>	5 100	μА
Maximum Reverse Recovery Time (Note 1)	T <sub>RR</sub>	- 50	nS
Typical Junction Capacitance (Note 2)	C <sub>J</sub>		pF
Typical Thermal Resistance (Note 3)	$R_{ heta JA}$	25	°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	

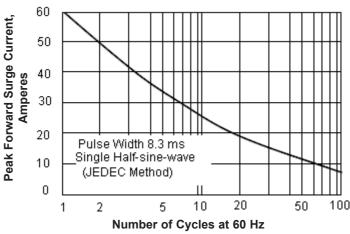
**Notes :** 1. Measured with  $I_F = 0.5 \text{ A}$ ,  $I_R = 1 \text{ A}$ ,  $I_{RR} = 0.25 \text{ A}$ .

- 2. Measured at 1 MHz and applied reverse voltage of 4 V dc.
- 3. Thermal resistance junction to ambient.

## **Rating and Characteristics Curves**



# Maximum Non-Repetitive Surge Current



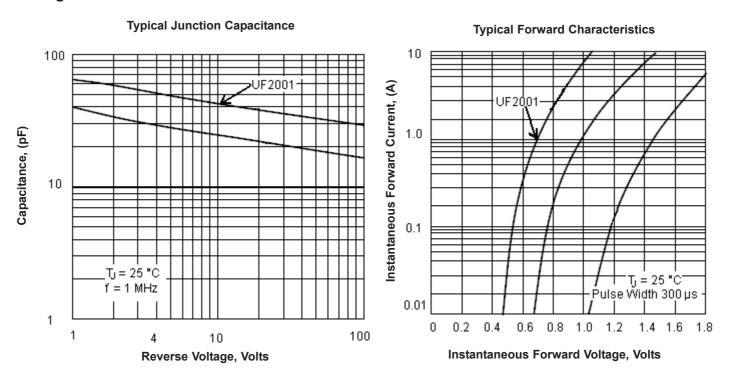
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## **Rating and Characteristics Curves**



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