Surface Mount High Efficiency Glass Passivated Rectifier





Features:

- · Low cost
- Diffused junction
- · Ultra fast switching for high efficiency
- Low reverse leakage current
- · Low forward voltage drop
- · High current capability
- The plastic material carries UL recognition 94V-0

Mechanical Data:

Case : Molded plastic body

Polarity : Colour band denotes cathode Weight : 0.002 ounces, 0.064 grams

Mounting position : Any

Reverse Voltage : 600 to 1000 Volts Forward Current : 1 Ampere

Maximum Ratings and Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	UF1J+	UF1K+	UF1M+	Unit
Max. Recurrent Peak Reverse Voltage	VRRM	600	800	1000	
Max. RMS Voltage	VRMS	420	560	700	V
Max. DC Blocking Voltage	VDC	600	800	1000	
Max. Average Forward Rectified Current	lF(AV)	1			
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Super Imposed on Rated Load(JEDEC Method)	İFSM	30		A	
Peak Forward Voltage at 1A DC	VF	1.7			V
Maximum DC Reverse Current @TJ=25°C at Rated DC Blocking Voltage @TJ=100°C	lR	5 100			μA
Maximum Reverse Recovery Time(Note1)	Trr	75		nS	
Typical Junction Capacitance (Note2)	Cı	10		pF	
Typical Thermal Resistance (Note3)	Rejl	25		°C/W	
Operating Temperature Range	TJ	FF to 11F0		°C	
Storage Temperature Range	Tstg	-55 to +150			

Notes:

- 1. Measured with IF=0.5A,IR=1A,IRR=0.25A.
- 2. Measured at 1MHz and applied reverse voltage of 4V DC.
- 3. Thermal resistance junction to lead.
- 4. The typical data above is for reference only

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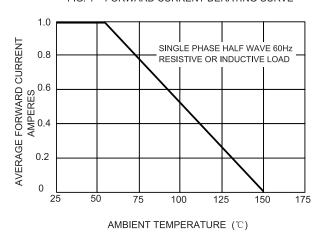


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Ratings and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE



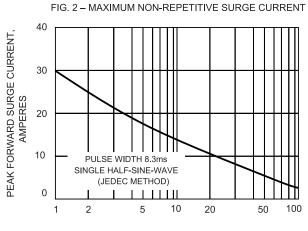


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

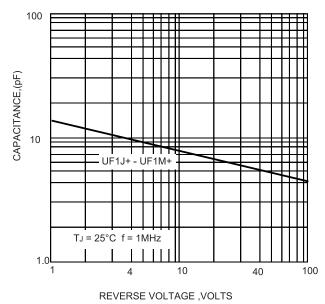
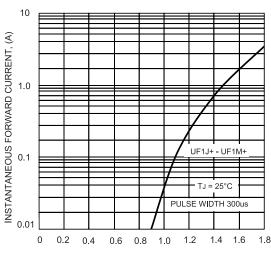


FIG.4-TYPICAL FORWARD CHARACTERISTICS

NUMBER OF CYCLES AT 60Hz



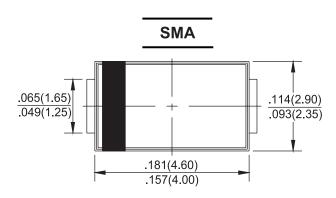
INSTANTANEOUS FORWARD VOLTAGE, VOLTS

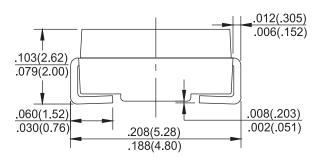


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Dimensions:





Dimensions: Inches (Millimetres)

Part Number Table

Description	Part Number		
Ultra Fast Diode 1A 600V SMA	UF1J+		
Ultra Fast Diode 1A 800V SMA	UF1K+		
Ultra Fast Diode 1A 1,000V SMA	UF1M+		

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