

# Surface Mount Super Fast Recover Rectifier



## Features:

- Low reverse leakage
- Glass passivated chip junction
- High forward surge capability
- High temperature soldering guaranteed: 260°C/10s seconds at terminals.

## Mechanical Data:

Case	: Molded plastic body
Terminals	: Solder plated
Polarity	: Colour band denotes cathode
Mounting position	: Any
Reverse Voltage	: 50 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%.

Type Number	Symbol	UF1AB	UF1BB	UF1DB	UF1JB	UF1KB	UF1MB	Unit
Max. Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	600	800	1000	V
Max. RMS Voltage	V <sub>RMS</sub>	35	70	140	420	560	700	
Max. DC Blocking Voltage	V <sub>DC</sub>	50	100	200	600	800	1000	
Max. Average Forward Rectified Current	I <sub>F(AV)</sub>	1						A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	I <sub>FSM</sub>	30						
Max. Peak Reverse Current Full Cycle @T <sub>A</sub> =75°C	I <sub>R(AV)</sub>	30						µA
Max. Forward Voltage I <sub>F</sub> = 1A	V <sub>F</sub>	1			1.7			V
Max. Reverse Current T <sub>A</sub> = 25°C	I <sub>R</sub>	5						µA
Max. Reverse Recovery Time I <sub>F</sub> = 0.5A I <sub>R</sub> = 1.0A I <sub>RR</sub> = 0.25A	T <sub>RR</sub>	50			75			nS
Type Junction Capacitance V <sub>R</sub> = 4.0V, f = 1MHz	C <sub>J</sub>	15						pF
Typical Thermal Resistance	R <sub>θJA</sub>	50						°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150						°C
Storage Temperature Range	T <sub>STG</sub>							

## Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance junction to lead.
3. The typical data above is for reference only

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## Ratings and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

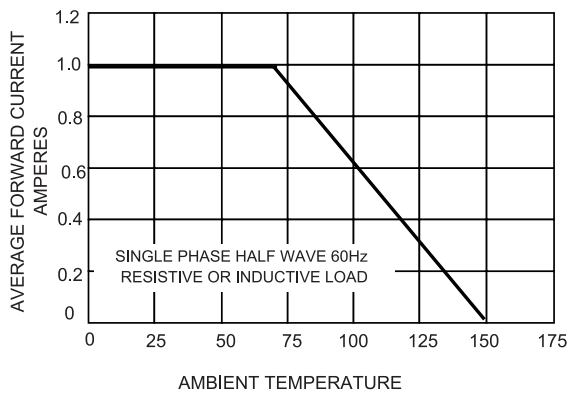


FIG. 2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

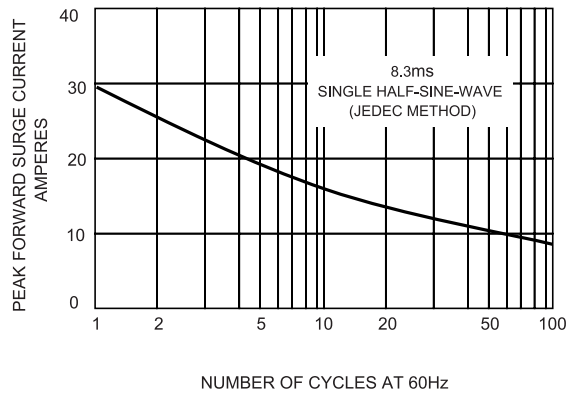


FIG.3 – TYPICAL JUNCTION CAPACITANCE

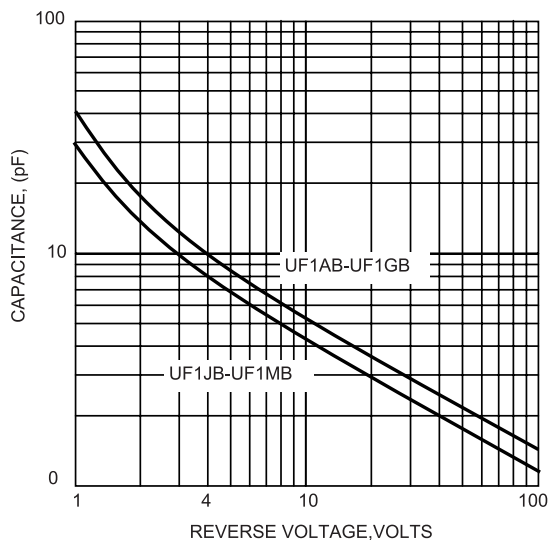


FIG.4-TYPICAL FORWARD CHARACTERISTICS

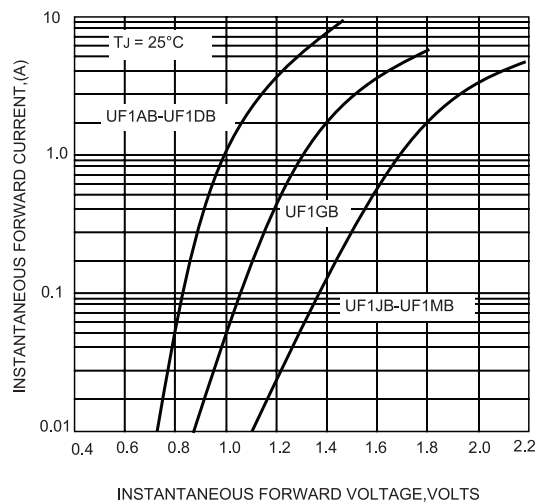
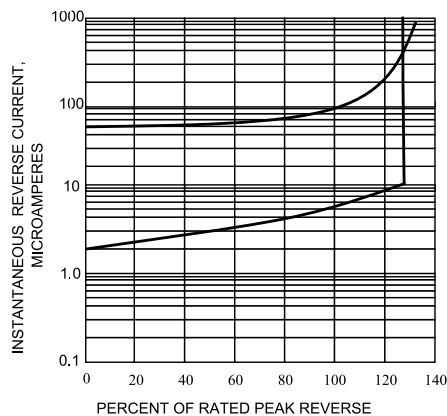


FIG.5-TYPIACL REVERSE CHARACTERISTICS

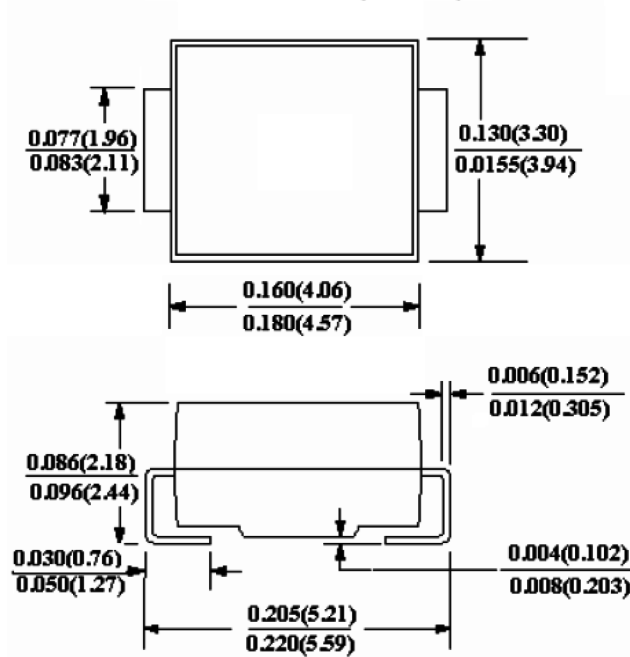


# Surface Mount Super Fast Recover Rectifier



## Dimensions:

### DO-214AA (SMB)



Dimensions : Inches (Millimetres)

## Part Number Table

Description	Part Number
Surface Mount Super Fast Recover Rectifiers	UF1AB
	UF1BB
	UF1DB
	UF1JB
	UF1KB
	UF1MB

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