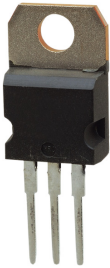


# Super Fast Recovery Rectifier **multicomp**PRO



## Features:

- Fred chip planar construction
- Super fast switching, high efficiency
- Low forward voltage drop
- Low forward voltage current
- High surge current capacity
- Plastic package has UL flammability classification 94V-0

## Mechanical Data:

Case	: TO-220AB Type, Molded Plastic
Terminals	: Pure Tin plated, Lead free Solderable Per MIL-STD-750, method 2026
Polarity	: As marked
Weight	: 1.2 grams
Mounting Position	: Any
Reverse Voltage	: 200Volts
Forward Current	: 8 Amperes

## Typical Application:

For use in High Frequency Rectifier of Switching Mode Power Supplies, Freewheeling Diode, DC/DC Converters or polarity Protection Application

## 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	Values	Unit
Max. Recurrent Peak Reverse Voltage	$V_{RRM}$	200	V
Max. RMS Voltage	$V_{RMS}$	140	
Max. DC Blocking Voltage	$V_{DC}$	200	
Maximum Average Forward Rectified Current	$I_{(AV)}$	8	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Super Imposed on Rated Load (JEDEC method)	$I_{FSM}$	100	
Peak Forward Voltage at 4A per leg	$V_F$	0.95	V
Max. DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_J = 25^{\circ}C$ 10	$\mu A$
		$T_J = 100^{\circ}C$ 250	
Max. Reverse Recovery Time (Note 1)	$T_{RR}$	35	nS
Typical Thermal Resistance, Junction to Case	$R_{\theta JC}$	2	$^{\circ}C/W$
Operating Temperature Range	$T_J$	-55 to +150	$^{\circ}C$
Storage Temperature Range	$T_{STG}$		

## Notes:

1. Measured with  $I_F = 0.5A$ ,  $I_R = 1A$ ,  $I_{RR} = 0.25A$ .
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. The typical data above is for reference only

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## Ratings and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

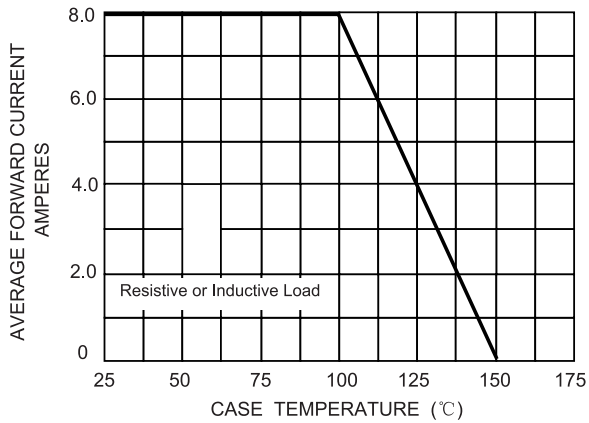


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

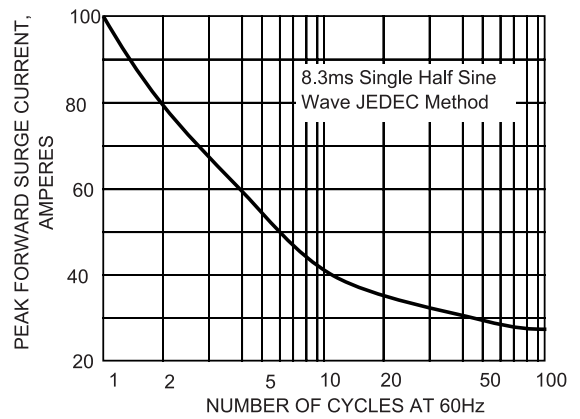


FIG.3-TYPICAL REVER CHARACTERISTICS

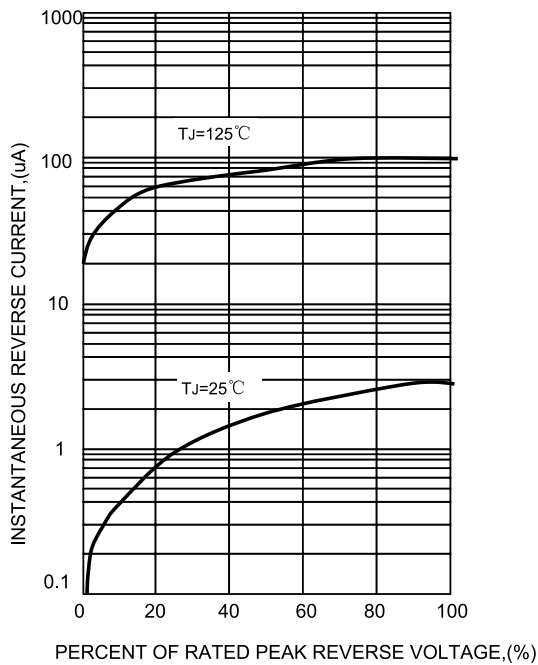
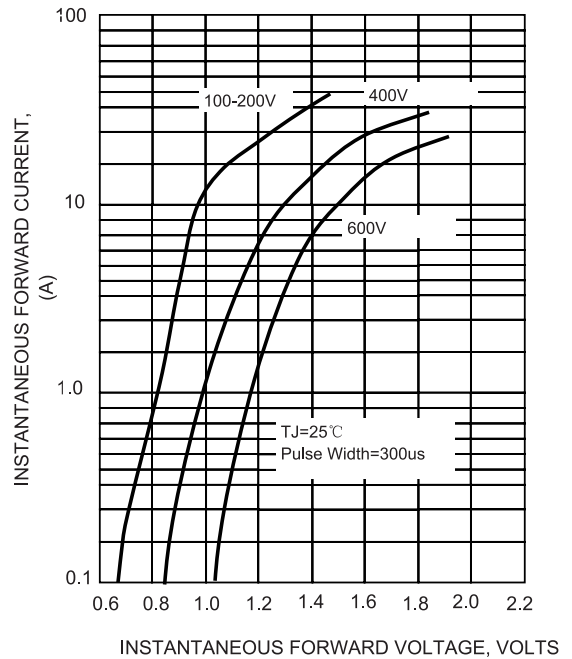


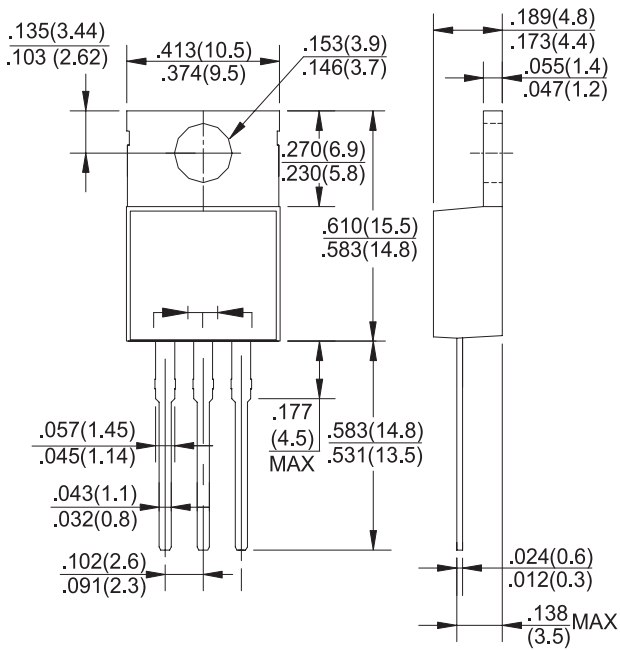
FIG.4-TYPICAL FORWARD CHARACTERISTICS



# Super Fast Recovery Rectifier **multicomp**PRO

## Dimensions:

### TO-220AB



Dimensions : Inches (Millimetres)

## Part Number Table

Description	Part Number
Super Fast Recovery Rectifier	SF804CT

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