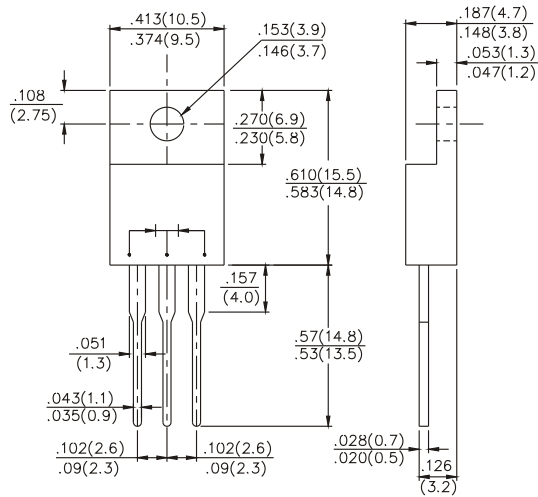
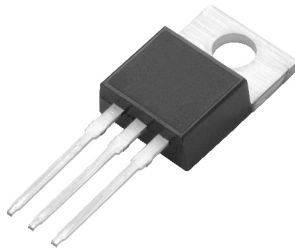


# SF1001CT thru SF1007CT

## SUPERFAST RECOVERY RECTIFIER

VOLTAGE - 50 TO 600 VOLTS    CURRENT - 10 AMPERES

### TO-220AB



Dimensions in inches and (millimeters)

### FEATURES

- Low forward voltage drop
- High Current Capability
- High reliability
- High surge Current Capability
- Good for switching mode application
- High temperature soldering : 260°C/10seconds at terminals
- Pb free product are available : 99% Sn above can meet RoHS Environment substance directive request

### MECHANICAL DATA

Case : TO220AB Molded plastic  
Epoxy : UL 94V-0 rate flame retardant  
Lead : Lead solderable per  
MIL-STD-202, Method 208 guaranteed  
Polarity : As Marked  
Mounting Position : Any  
Weight : 2.24gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SF1001CT	SF1002CT	SF1003CT	SF1004CT	SF1005CT	SF1006CT	SF1007CT	UNITS
Maximum Repetitive Peak Reverse Voltage	50	100	150	200	300	400	600	Volts
Maximum RMS Voltage	35	70	105	140	210	320	420	Volts
Maximum DC Blocking Voltage	50	100	150	200	300	400	600	Volts
Maximum Average Forward Rectified Current .375" (9.5mm) Lead Length at T <sub>C</sub> =100°C	10							Amps
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	150							Amps
Maximum Instandeous Forward Voltage at 5.0A	0.95				1.3		1.7	Volts
Maximum DC Reverse Current T <sub>A</sub> =25°C at Rated DC Blocking Voltage T <sub>A</sub> =100°C	10 500							μ A
Maximum Reverse Recovery Time (Note 1)	35				50			nS
Typical Junction Capacitance (Note 2)	50							pF
Operating and Storage Temperature Range T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150							°C

#### NOTES :

1. Reverse Recovery Time test condition I<sub>F</sub>=0.5A , I<sub>R</sub>=1.0A , I<sub>RR</sub>=0.25A
2. Measured at 1.0MHz and applied reverse Voltage of 4.0V D.C

# SF1001CT thru SF1007CT

## SUPERFAST RECOVERY RECTIFIER

### RATINGS AND CHARACTERISTIC CURVES SF1001CT THRU SF1007CT

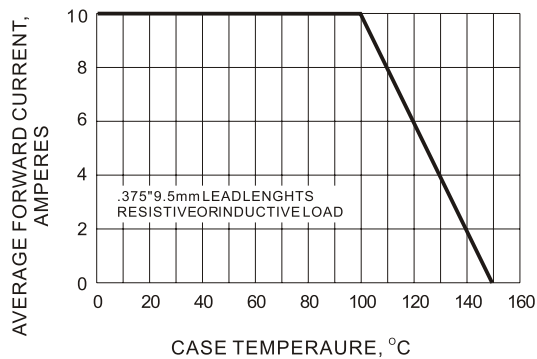


Fig.1- FORWARD CURRENT DERATING CURVE

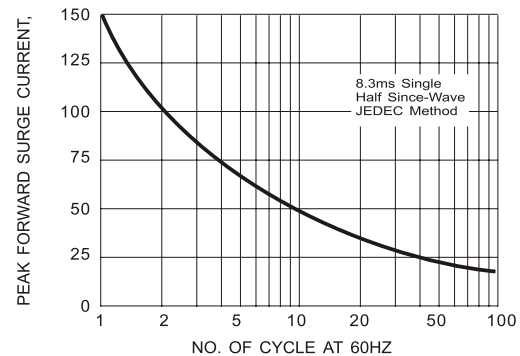


Fig.2- TMAXIMUM NON - REPETITIVE SURGE CURRENT

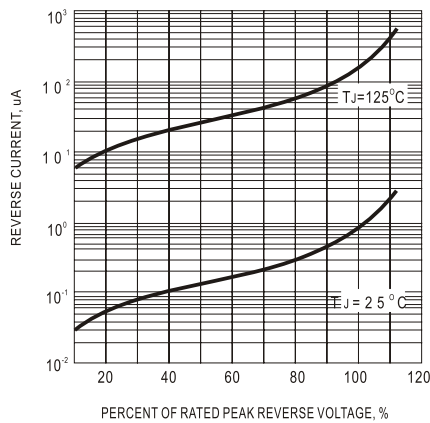


Fig.3- TYPICAL REVERSE CHARACTERISTIC

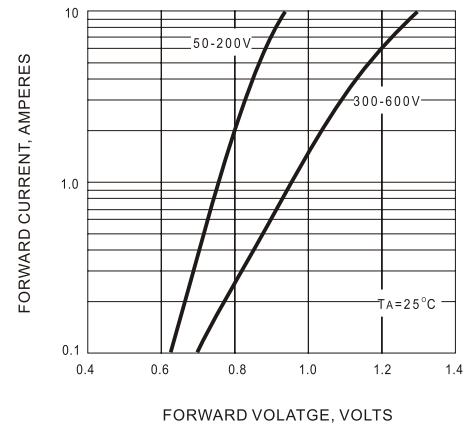


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC