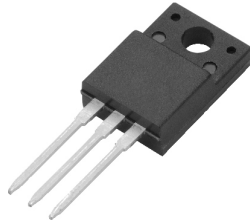


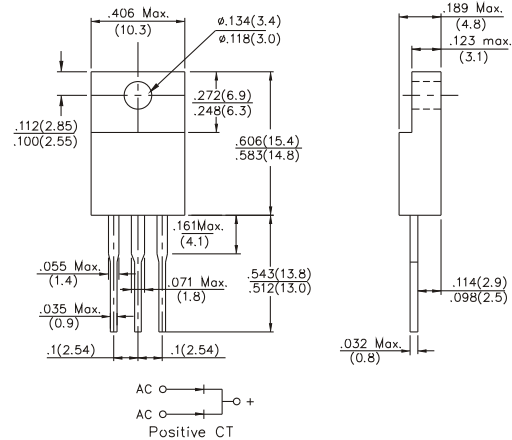
# SF1601FCT thru SF1607FCT

## SUPERFAST RECOVERY RECTIFIER

VOLTAGE - 50 TO 600 VOLTS CURRENT - 16 AMPERES



ITO-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 : ITO220AB Molded plastic  
 Epoxy : UL 94V-0 rate flame retardant  
 Lead : Lead solderable per MIL-STD-202, Method 208 guranteed  
 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	SF 1601FCT	SF 1602FCT	SF 1603FCT	SF 1604FCT	SF 1605FCT	SF 1606FCT	SF 1607FCT	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	16							Amps
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	125							Amps
Maximum Instantaneous Forward Voltage at 8.0A	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				μA
Typical Junction Capacitance (Note 1)	62							pF
Maximum Reverse Recovery Time (Note 2)	35				50			nS
Typical Thermal Resistance Note R <sub>θJC</sub>	3.0							°C / W
Operating and Storage Temperature Range T <sub>J</sub>	-55 to +150							°C

NOTES :

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

# SF1601FCT thru SF1607FCT

## SUPERFAST RECOVERY RECTIFIER

### RATINGS AND CHARACTERISTIC CURVES SF1601FCT THRU SF1607FCT

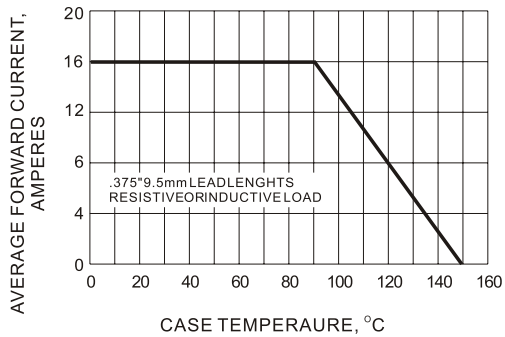


Fig.1- FORWARD CURRENT DERATING CURVE

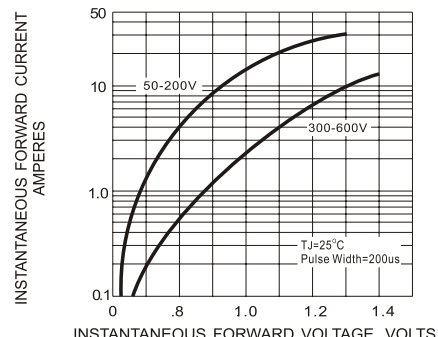


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

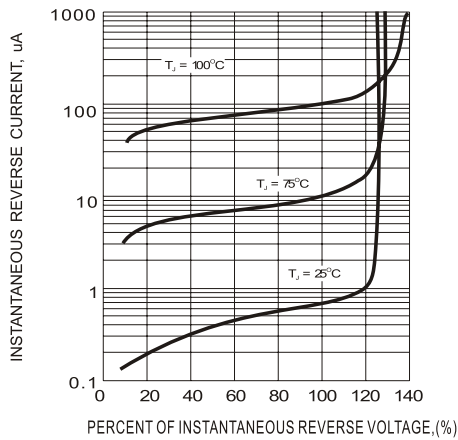


Fig.3- TYPICAL REVERSE CHARACTERISTIC

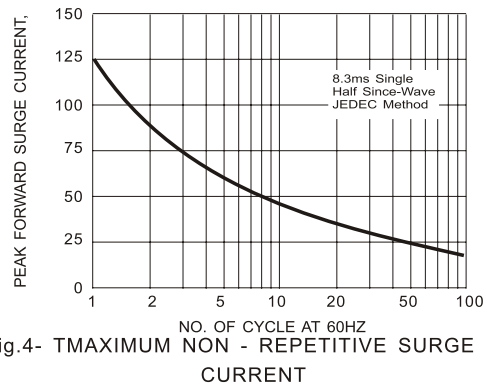


Fig.4- TMAXIMUM NON - REPETITIVE SURGE CURRENT

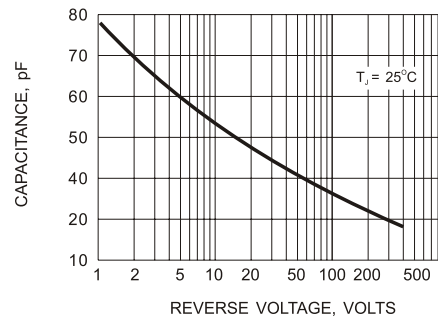


Fig.5- TYPICAL JUNCTION CAPACITANCE