

GLASS PASSIVATED SUPER FAST RECTIFIER
VOLTAGE RANGE 50 to 600 Volts CURRENT 16 Amperes

FEATURES

- * Low switching noise
- * Low forward voltage drop
- * Low thermal resistance
- * High current capability
- * Super fast switching speed
- * High reliability
- * Good for switching mode circuit

MECHANICAL DATA

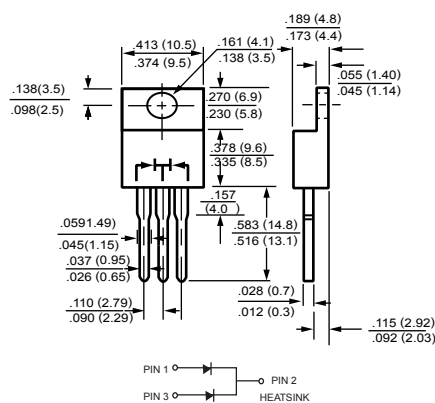
- * Case: TO-220 molded plastic
- * Epoxy: Device has UL flammability classification 94V-0
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



TO-220



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	SF161C	SF162C	SF163C	SF164C	SF165C	SF166C	SF167C	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	600	Volts
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	420	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	600	Volts
Maximum Average Forward Rectified Current at T _C = 125°C	I _O	16.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	150							Amps
Typical Current Squared Time	I ² t	93.37							A ² /Sec
Typical Thermal Resistance	R _{θJC}	3							°C/W
Typical Junction Capacitance (Note 2)	C _J	50					30		pF
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 150							°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	SF161C	SF162C	SF163C	SF164C	SF165C	SF166C	SF167C	UNITS
Maximum Instantaneous Forward Voltage at 8.0A DC		V _F	1.0				1.35		1.70	Volts
Maximum DC Reverse Current	@T _C = 25°C	I _R	10							uAmps
at Rated DC Blocking Voltage	@T _C = 100°C		500							
Maximum Reverse Recovery Time (Note 1)		t _{rr}	35				50		nSec	

NOTES : 1. Test Conditions: I_F = 0.5A, I_R = -1.0A, I_{RR} = -0.25A
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. Suffix "A" =Common Anode.

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REV:B

RATING AND CHARACTERISTIC CURVES (SF161C THRU SF167C)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

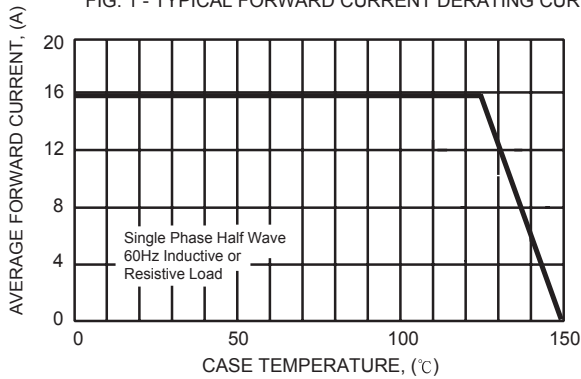


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

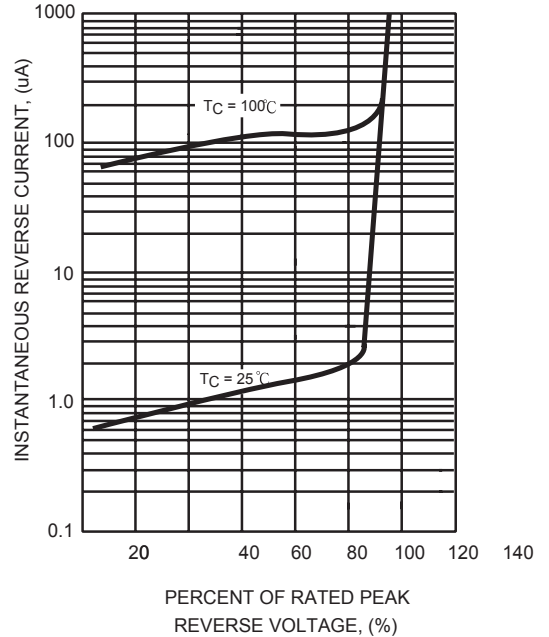


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

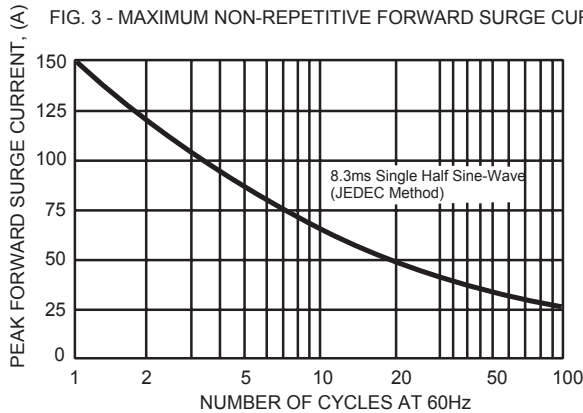


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

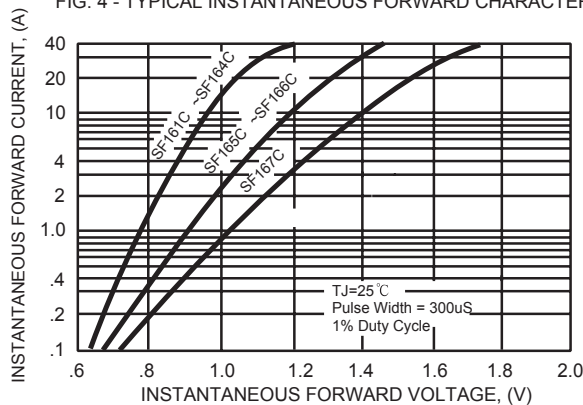
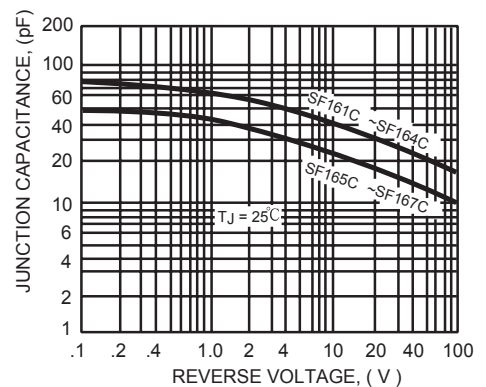


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

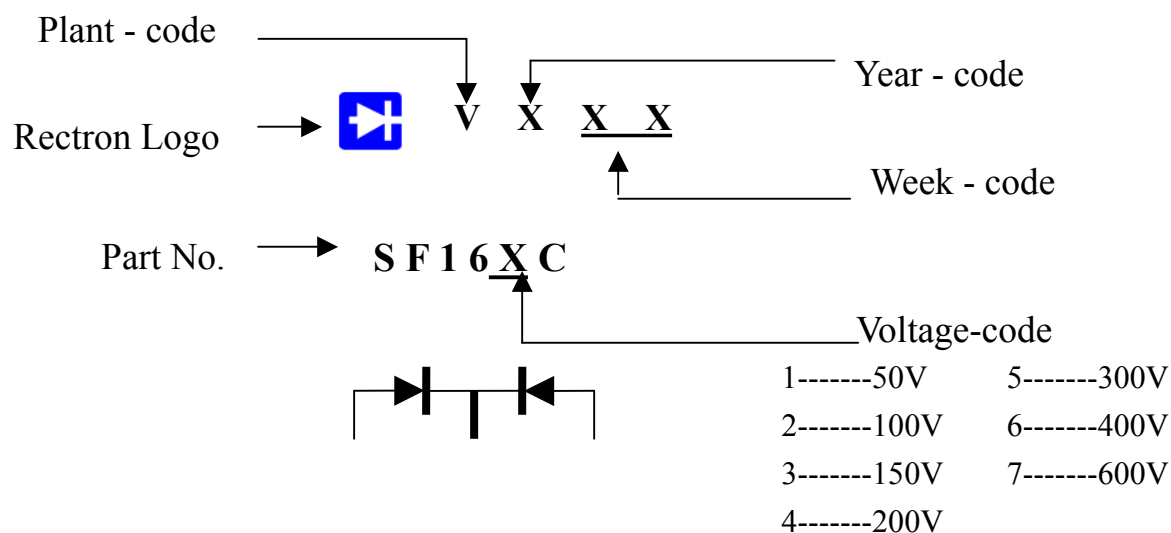
TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	WEIGHT(Kg)
TO-220	-C	1,000	555*150*40	580*230*175	5,000	15.0



Attachment information about SF16XC

Marking on the body



Items marked on the inner box and carton

1 .On the box (for –C)

CUSTOMER
TYPE
LOT NO.
QUANTITY
Q.A.
DATE

2 .On the carton

CUSTOMER
TYPE
QUANTITY
LOT NO.
REMARK

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