

SF161C ~ SF166C

PRV : 50 ~ 400 Volts

Io : 16 Ampere

FEATURES :

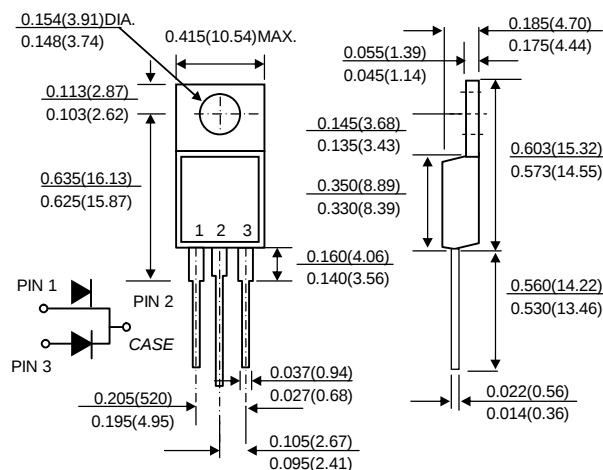
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Super fast switching speed
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight : 2.24 grams (Approximately)

SUPER FAST RECTIFIERS

TO-220AB



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%.

RATING	SYMBOL	SF161C	SF162C	SF163C	SF164C	SF165C	SF166C	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	150	200	300	400	V
Maximum Working Reverse Voltage	VRWM	35	70	105	140	210	280	V
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	V
Maximum Average Forward Current Total Device,(Rated VR), Tc = 125°C	IF(AV)	8.0 (Per Leg) 16 (Total Device)						A
Maximum Peak Rectified Forward Current 8.3 ms single half sine-wave, superimposed on rated load (JEDEC method)	IFSM	150						A
Maximum Instantaneous Forward Voltage at IF = 8 A	VF	1.0				1.35		V
Maximum Reverse Current at Tc = 25 °C	IR	10						μA
Rated DC Blocking Voltage Tc = 100 °C	IR(H)	500						μA
Typical Thermal Resistance, Junction to Case	RθJC	3.0						°C/W
Typical Junction Capacitance ⁽¹⁾	CJ	50.0				30		pF
Maximum Reverse Recovery Time ⁽²⁾	Trr	35				50		ns
Operating and Storage Temperature Range	TJ, TSTG	- 65 to + 150						°C

Notes :

(1) Measured at 1 MHz and applied reverse voltage of 4.0 volts.

(2) Reverse Recovery Test Conditions : IF = 0.5A, IR = 1A ; Irr = 0.25 A

RATING AND CHARACTERISTIC CURVES (SF161C ~ SF166C)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

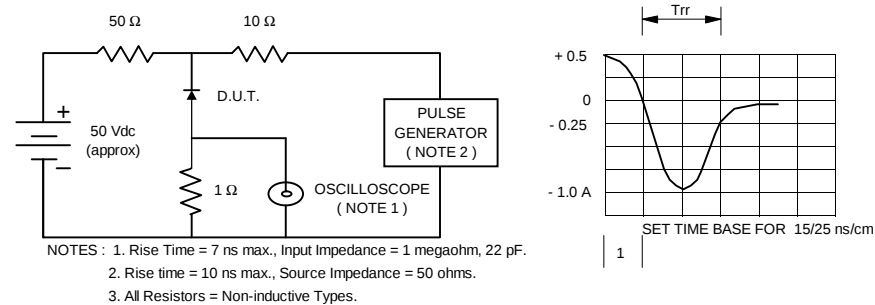


FIG. 2 - DERATING CURVE FOR OUTPUT CURRENT

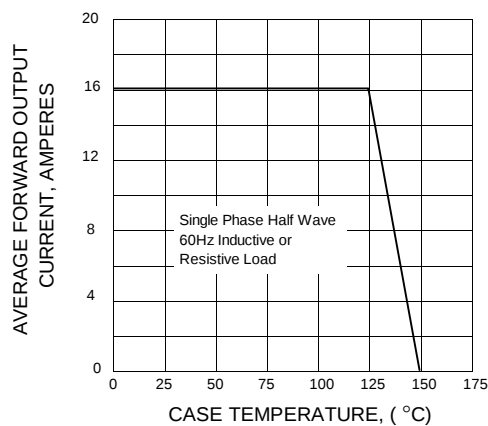


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

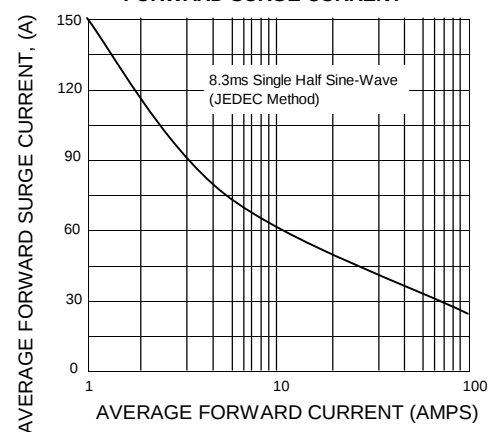


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

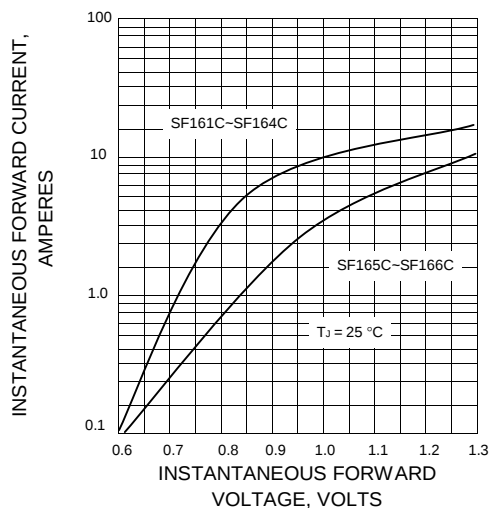


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

