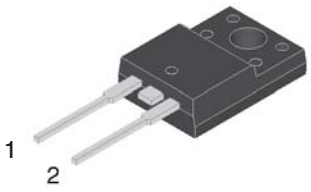
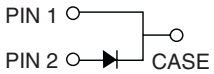
8.0 Amp. Schottky Barrier Rectifier

ITO-220AC





Case Positive

Voltage	Current
20 to 150 V	8.0 A

FEATURES

- Ideal for automated placement
- Low power losses, high efficiency
- High surge current capability
- Guarding for overvoltage protection
- Low forward voltage drop
- Solder dip 260ºC, 10s / 0.25" (6.35 mm) from case
- AEC-Q101 qualified
- Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C

MECHANICAL DATA

- **Case:** ITO-220AC. Epoxy meets UL 94V-0 flammability rating.
- **Polarity:** As marked on the body.
- **Mounting Torque:** 5 in-lbs maximum.
- **Terminals:** Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test.

TYPICAL APPLICATIONS

Used in low voltage high frequency inverters, freewheeling, dc-to-dc converters, and polarity protection applications.

Maximun Ratings and Electrical Characteristics at 25°C

		SRAF 820	SRAF 840	SRAF 860	SRAF 8100	SRAF 8150
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	20	40	60	100	150
V_{RMS}	Maximum RMS Voltage (V)	14	28	42	70	105
V_{DC}	Maximum DC Blocking Voltage (V)	20	40	60	100	150
$I_{F\ (AV)}$	Maximum Average Forward Rectified Current See Fig.	8.0 A				
I_{FSM}	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	150 A				
C_j	Typical Junction Capacitance at 1MHz and Applied Reverse Voltage of 4V D.C.	430 pF		360 pF		
T_j	Operating Junction Temperature Range	– 65 to + 125 °C		– 65 to + 150 °C		
T_{stg}	Storage Temperature Range	– 65 to + 150 °C				

Electrical Characteristics at Tamb = 25 °C

V_F	Maximum Instantaneous Forward Voltage @8.0A	0.55 V	0.70 V	0.85 V	0.95 V
I_R	Maximum D.C. Reverse Current @Tc = 25 °C	0.5 mA		0.1 mA	
	at Rated DC Blocking Voltage @Tc = 100 °C	15 mA	10 mA	5.0 mA	
R_{thj-c}	Typical Thermal Resistance (Note 1)	5.0 °C/W			

Notes: 1. Thermal Resistance from Junction to case Per Leg

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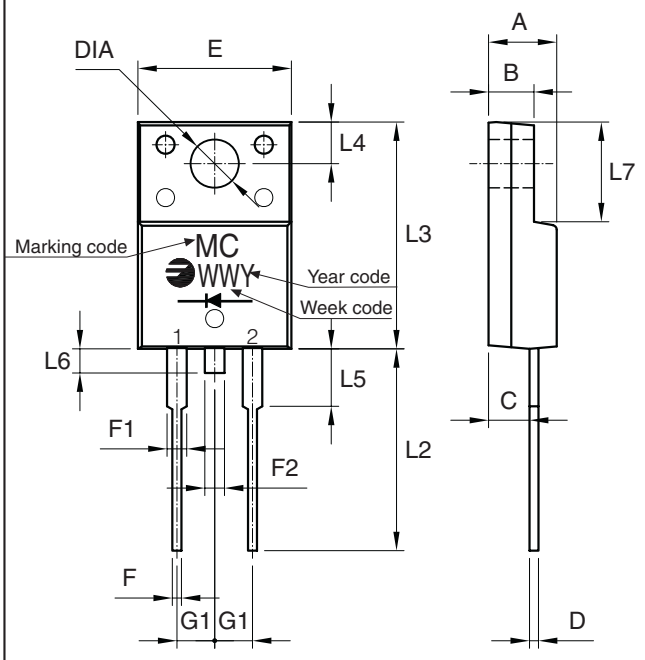
Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
SRAF860 00TUC	TU	TUBE	1,000	2.02

Package Outline Dimensions: (mm) ITO-220AC



REF.	DIMENSIONS		
	Milimeters		
	Min.	Nominal	Max.
A	4.40	-	4.70
B	3.00	-	3.16
C	2.50	-	2.80
D	0.50	-	0.76
E	9.90	-	10.30
F	0.50	-	0.90
F1	1.10	-	1.40
F2	-	-	1.80
G1	2.40	2.55	2.70
L2	13.20	-	13.80
L3	14.80	-	15.50
L4	2.55	-	2.85
L5	3.70	-	4.10
L6	-	-	1.60
L7	6.30	-	6.90
DIA	3.00	-	3.40

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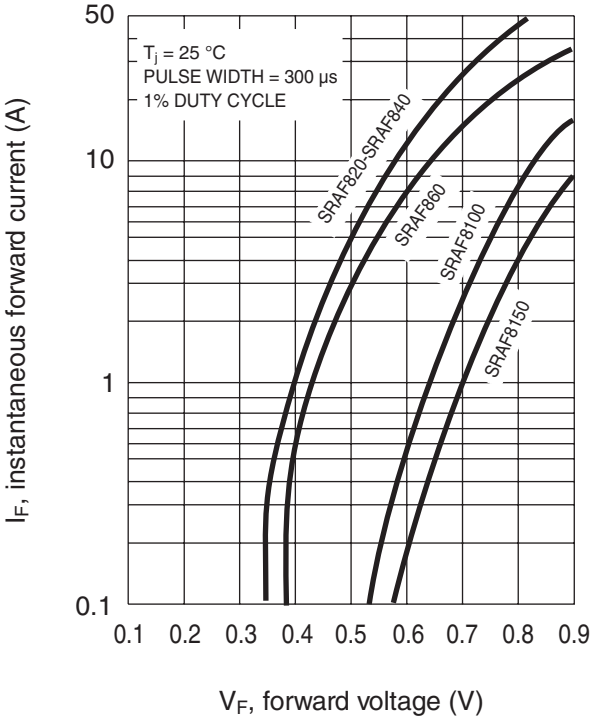
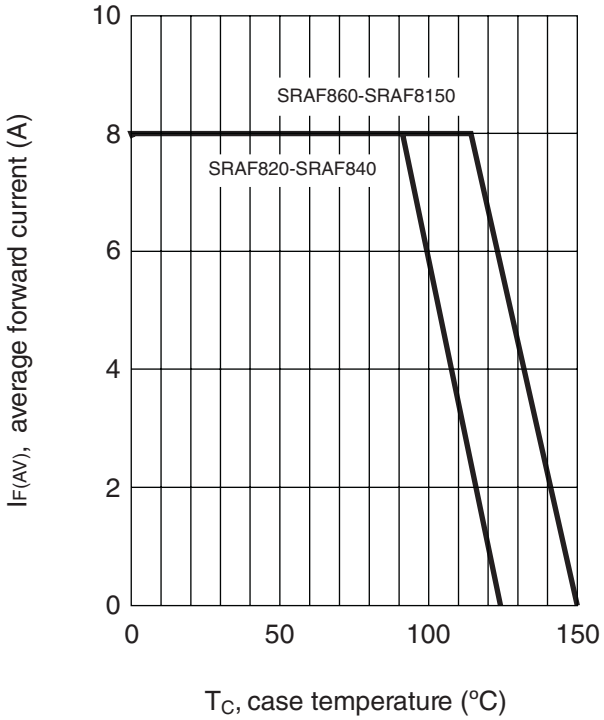
Ratings and Characteristics (Ta 25 ºC unless otherwise noted)

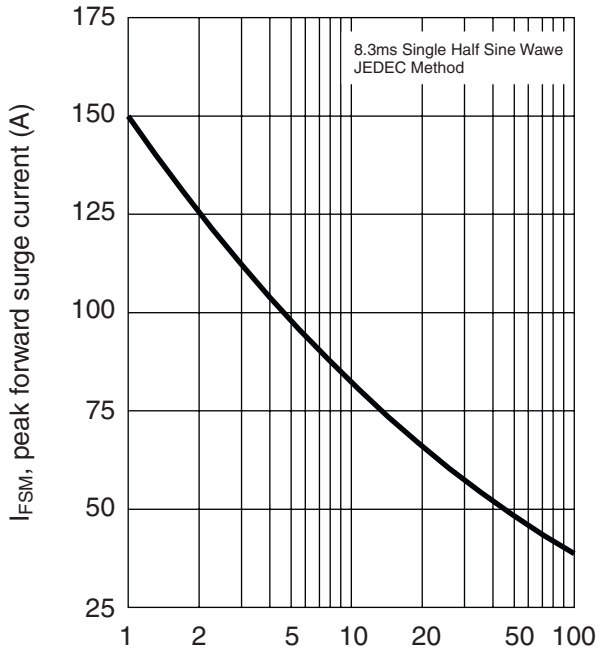
TYPICAL FORWARD CHARACTERISTICS



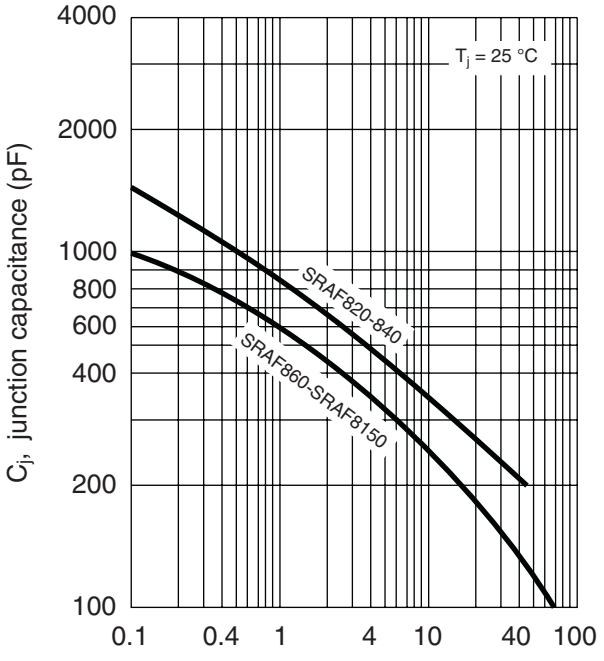
MAXIMUM FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE



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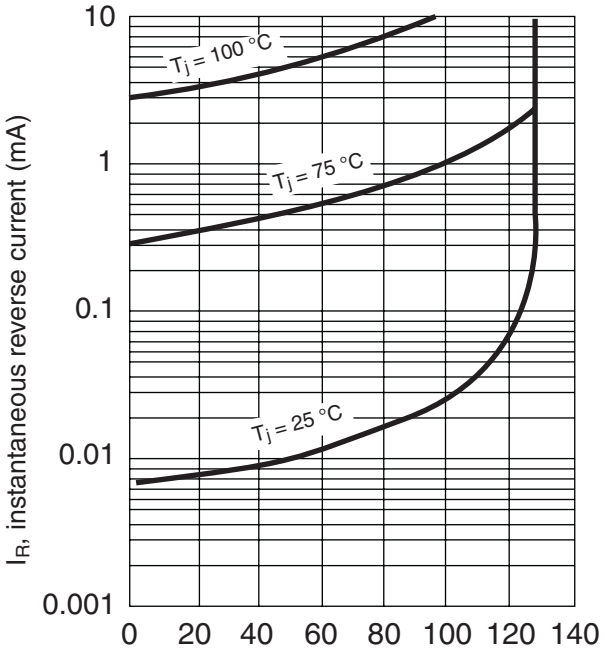
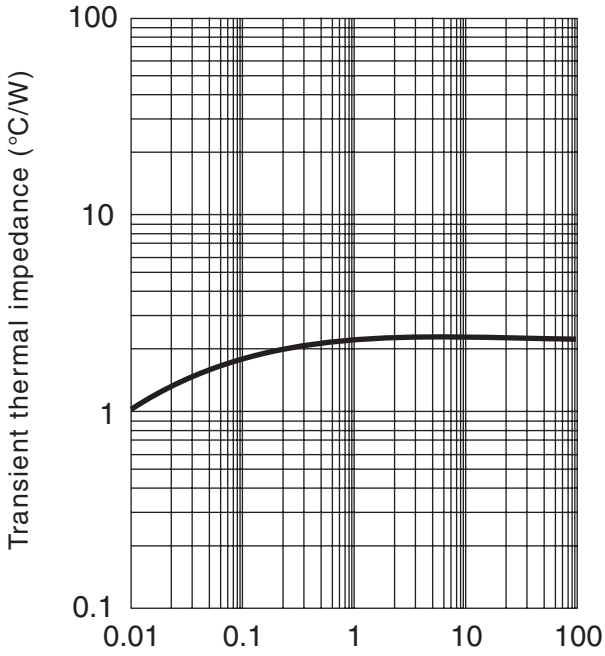
Ratings and Characteristics (Ta 25 ºC unless otherwise noted)

TYPICAL REVERSE CHARACTERISTICS



TYPICAL TRANSIENT THERMAL CHARACTERISTICS



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Revision History

Date	Revision	Description of Changes
14-Jul-2009	0	Original Data Sheet
3-Oct-2016	1	Format update

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