

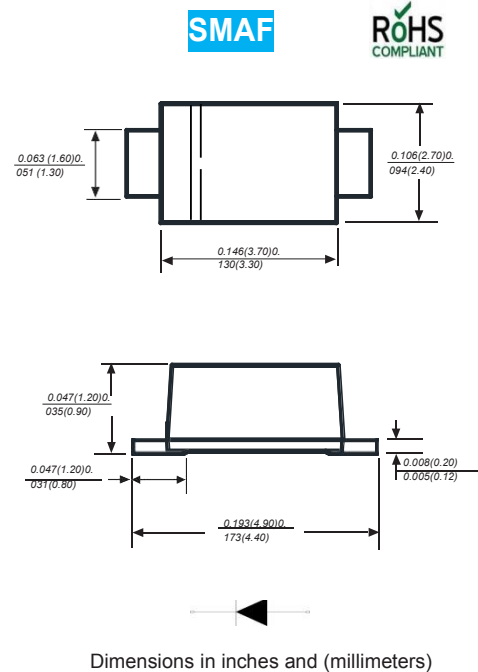
SURFACE MOUNT GENERAL RECTIFIER

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Idea for printed circuit board
- ◆ Open Junction chip
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed 250°C/10 seconds at terminals

Mechanical Data

Case : SMAF molded plastic body
 Terminals : Solderable per MIL-STD-750, Method 2026
 Polarity : Polarity symbol marking on body
 Mounting Position : Any
 Weight : 0.0018 ounce, 0.064 grams



Maximum Ratings And Electrical Characteristics

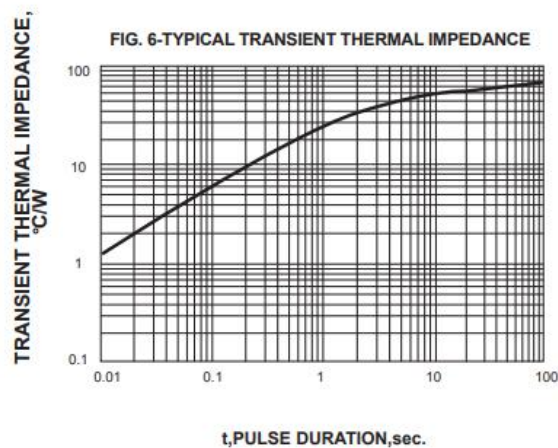
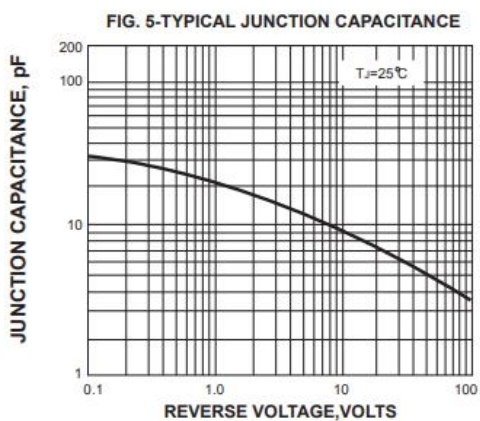
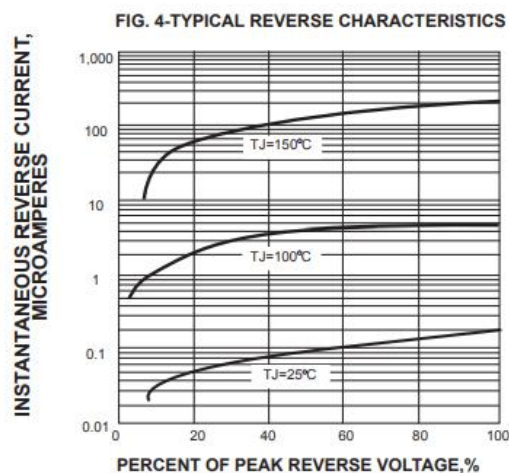
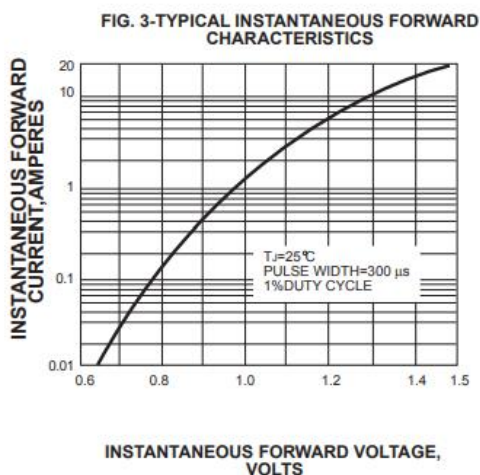
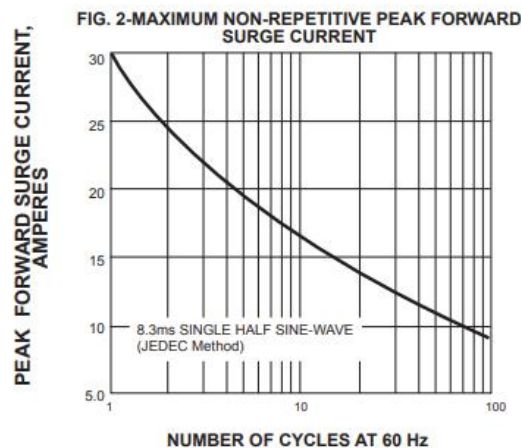
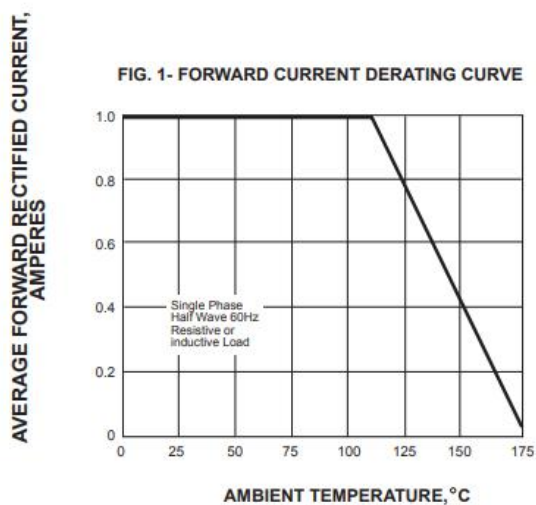
Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

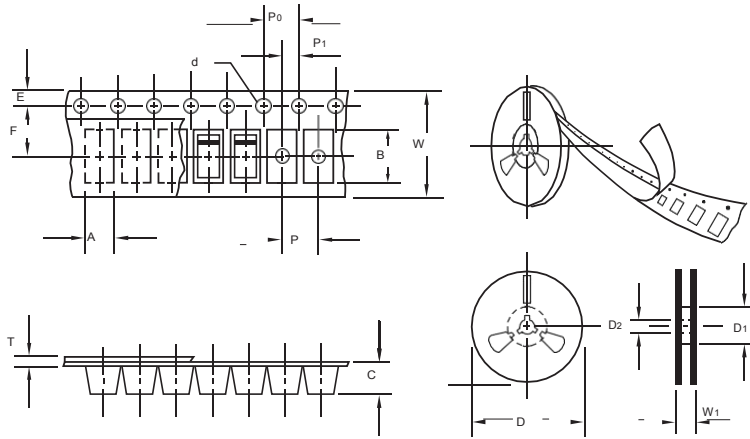
Parameter	SYMBOLS	S1AF	S1BF	S1DF	S1GF	S1JF	S1KF	S1MF	UNITS
Marking Code		RCD S1AF	RCD S1BF	RCD S1DF	RCD S1GF	RCD S1JF	RCD S1KF	RCD S1MF	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at TL=75°C	I _(AV)	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30							A
Maximum instantaneous forward voltage at 1.0A	V _F	1.10							V
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=125°C	I _R	5.0 50.0							uA
Typical junction capacitance (NOTE 1)	C _J	15.0							pF
Typical thermal resistance (NOTE 2)	R _{θJA}	75.0							°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150							°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

Typical Characteristics



Packing information



unit:mm

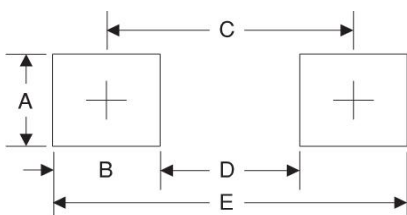
Item	Symbol	Tolerance	SMAF
Carrier width	A	0.1	2.80
Carrier length	B	0.1	4.75
Carrier depth	C	0.1	1.42
Sprocket hole	d	0.05	1.50
7" Reel outside diameter	D	2.0	178.00
7" Reel inner diameter	D ₁	min	54.40
Feed hole diameter	D ₂	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	5.05
Punch hole pitch	P	0.1	4.00
Sprocket hole pitch	P ₀	0.1	4.00
Embossment center	P ₁	0.1	2.00
Overall tape thickness	T	0.1	0.30
Tape width	W	0.3	8.00
Reel width	W ₁	1.0	12.30

Note: Devices are packed in accordance with EIA standard RS-481-A and specifications listed above.

Reel packing

PACKAGE	REEL SIZE	REEL (pcs)	COMPONENT SPACING (m/m)	BOX (pcs)	INNER BOX (m/m)	REEL DIA, (m/m)	CARTON SIZE (m/m)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
SMAF	7"	3,000	4.0	6,000	210*208*203	178	400*265*400	120,000	10.0

Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.8	0.071
B	1.6	0.063
C	3.8	0.150
D	2.2	0.087
E	5.4	0.213