

# SS32F THRU SS320F

## 3.0A Surface Mount Schottky Barrier Rectifiers - 20V-200V

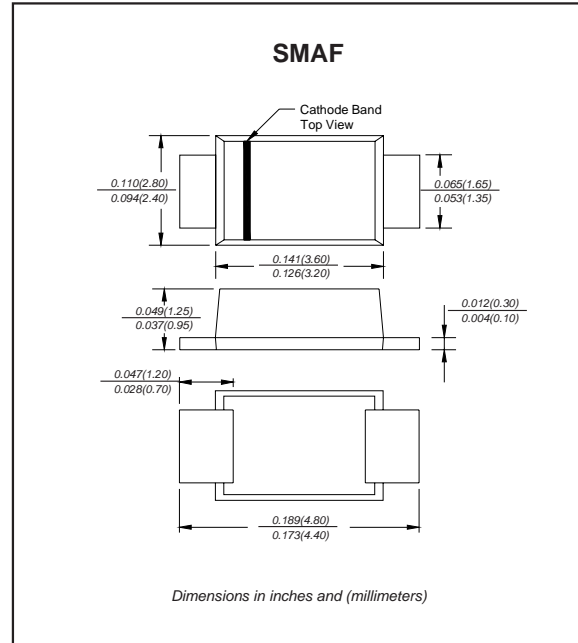
### Features

- ▶ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ▶ For surface mounted applications
- ▶ Metal silicon junction, majority carrier conduction
- ▶ Low power loss, high efficiency
- ▶ Built-in strain relief, ideal for automated placement
- ▶ High forward surge current capability
- ▶ High temperature soldering guaranteed: 250°C/10 seconds at terminals
- ▶ Compliant to RoHS Directive 2011/65/EU

### Mechanical data

- ▶ **Case:** JEDEC SMF molded plastic body
- ▶ **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- ▶ **Polarity:** Color band denotes cathode end
- ▶ **Mounting Position:** Any
- ▶ **Weight:** 0.0018 ounce, 0.064 grams

### Package outline



### Maximum ratings and Electrical Characteristics (AT T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I <sub>O</sub>			3.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I <sub>FSM</sub>			80	A
Reverse current	V <sub>R</sub> = V <sub>RRM</sub> T <sub>A</sub> = 25°C	I <sub>R</sub>			0.5	mA
	V <sub>R</sub> = V <sub>RRM</sub> T <sub>A</sub> = 100°C				10	
Thermal resistance	Junction to ambient NOTE 1	R <sub>θJA</sub>		55		°C/W
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C <sub>J</sub>		500		pF
Storage temperature		T <sub>STG</sub>	-65		+150	°C

**Note:** 1.P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

SYMBOLS	V <sub>RM</sub> <sup>*1</sup> (V)	V <sub>RMS</sub> <sup>*2</sup> (V)	V <sub>R</sub> <sup>*3</sup> (V)	V <sub>F</sub> <sup>*4</sup> (V)	Operating temperature T <sub>J</sub> (°C)
SS32F	20	14	20	0.45	-55 to +125
SS33F	30	21	30	0.55	
SS34F	40	28	40		
SS35F	50	35	50	0.70	-55 to +150
SS36F	60	42	60		
SS38F	80	56	80	0.85	
SS310F	100	70	100		
SS315F	150	105	150		
SS320F	200	140	200		

\*1 Repetitive peak reverse voltage

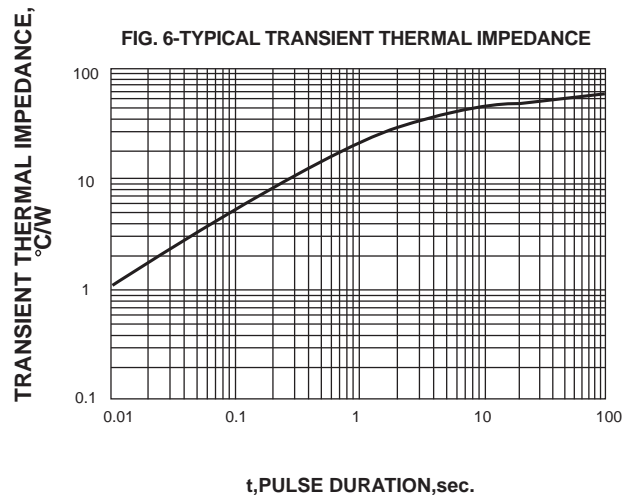
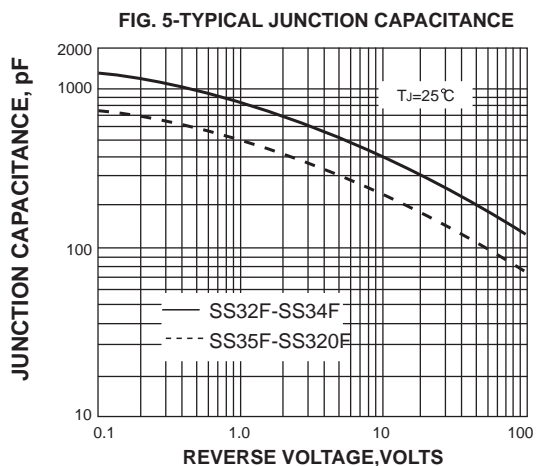
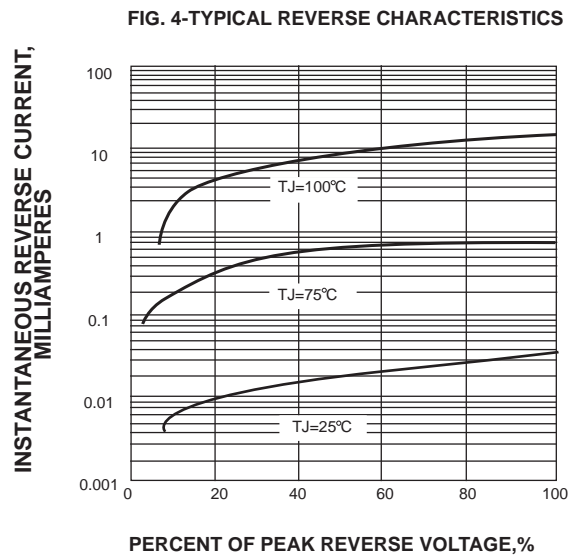
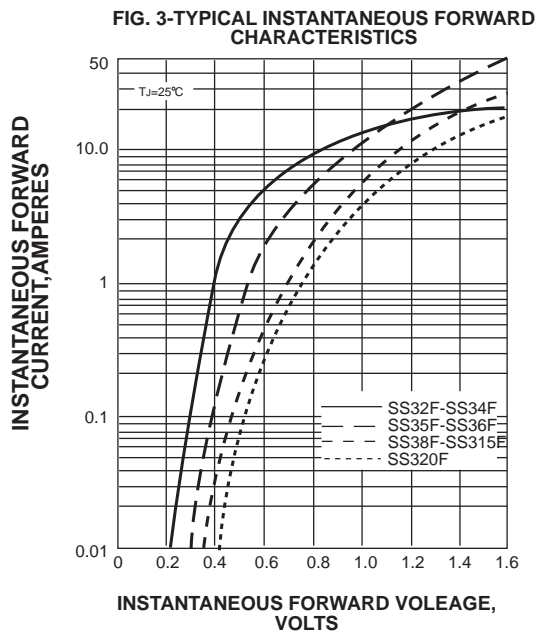
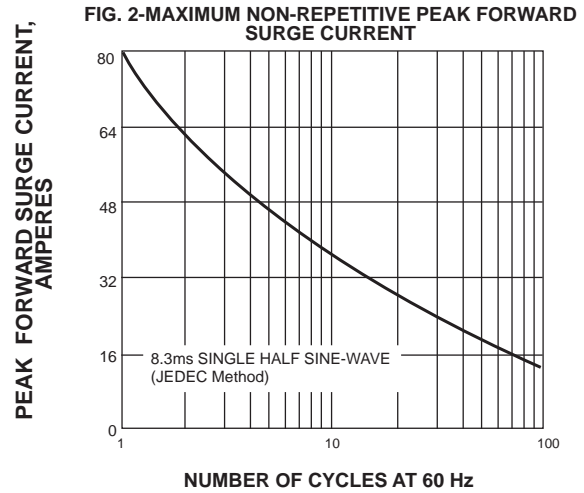
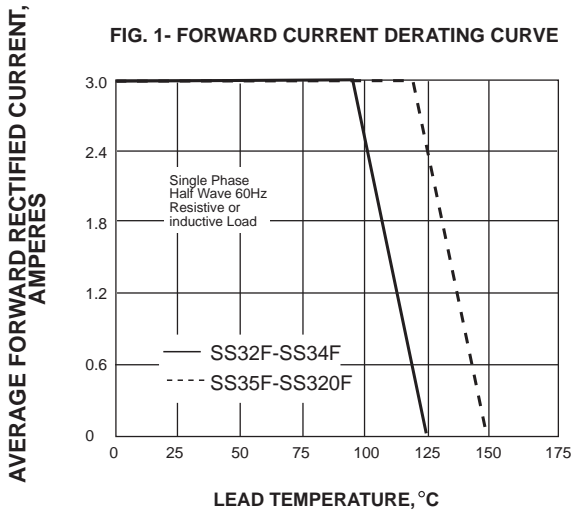
\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage@I<sub>F</sub>=3.0A

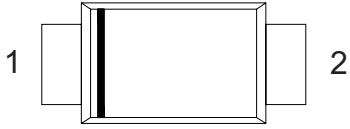

# SS32F THRU SS320F

## Rating and characteristic curves (SS32F THRU SS320F)

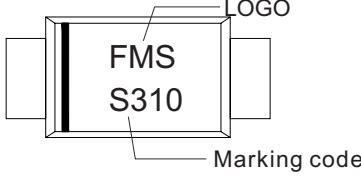


**SS32F THRU SS320F**

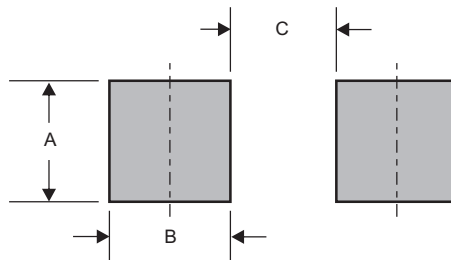
**Pinning information**

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

**Marking**

Type number	Marking code	Example
SS32F	S32	
SS33F	S33	
SS34F	S34	
SS35F	S35	
SS36F	S36	
SS38F	S38	
SS310F	S310	
SS315F	S315	
SS320F	S320	

**Suggested solder pad layout**



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMAF	0.110 (2.80)	0.063 (1.60)	0.079 (2.00)