

1A SCHOTTKY BARRIER RECTIFIER

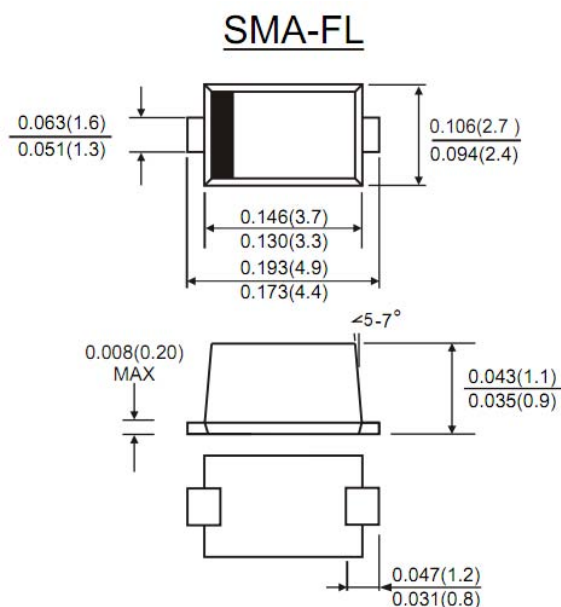
Reverse Voltage 20 to 200 Volts Forward Current 1.0 Amperes

Features

- Metal silicon junction, majority carrier conduction
- Guardring for overvoltage protection
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- High temperature soldering guaranteed:
250°C/10 seconds at terminals
- Plastic package has Underwriters Laboratory
Flammability Classification 94V-0
- For use in low voltage, high frequency inverters,
free wheeling, and polarity protection application

Mechanical Data

- Case: SMA-FL molded plastic body
- Terminals: Plated axial leads,
solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.0027 grams (approximate)



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	SS 12F	SS 13F	SS 14F	SS 15F	SS 16F	SS 18F	SS 110F	SS 115F	SS 120F	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	150	200	V
Average Rectified Output Current 0.375"(9.5mm) lead length	I _O	1.0									A
Peak forward surge current, 8.3 mS single half sine-wave superimposed on rated load	I _{FSM}	30.0									A
Maximum instantaneous forward voltage at I _O	V _F	0.55			0.70		0.85		0.95		V
Maximum DC reverse current @ T _A = 25°C at rated DC blocking voltage @ T _A = 100°C	I _R	0.5 5.0							0.3 3.0		mA
Typical junction capacitance (Note 1)	C _J	80									pF
Typical thermal resistance (Note 2)	R _{θJA}	70.0									°C/W
Operating junction temperature range	T _J	-55 to +125							-55 to +150		°C
Storage temperature range	T _{STG}	-55 to +150									°C

Notes: 1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2. P.C.B. mounted with 0.2×0.2"(5.0×5.0 mm) copper pad areas..

Ratings and Characteristic Curves

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

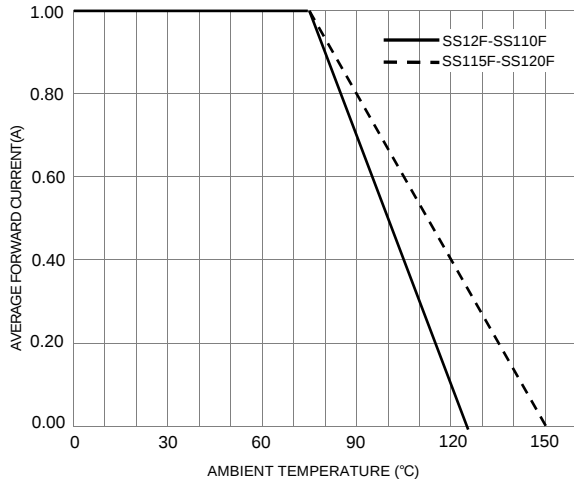


FIG. 2 – TYPICAL FORWARD CHARACTERISTICS

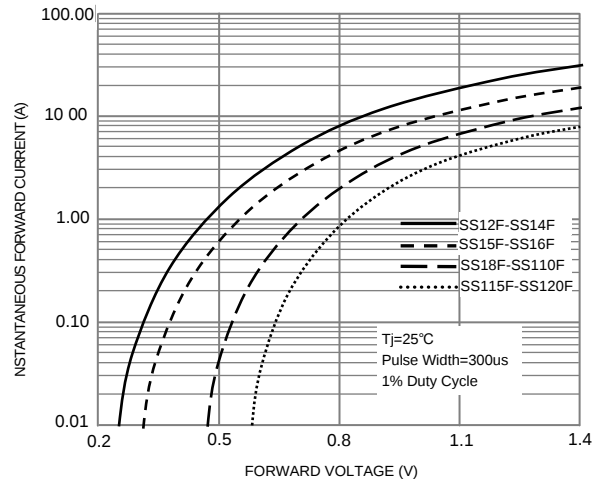


FIG. 3 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

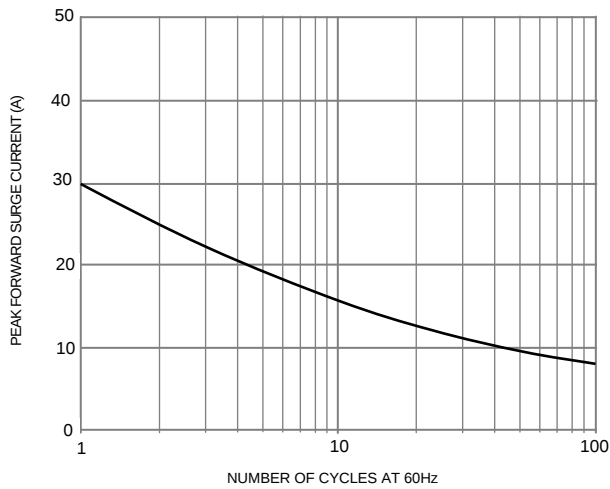


FIG. 4 – TYPICAL REVERSE CHARACTERISTICS

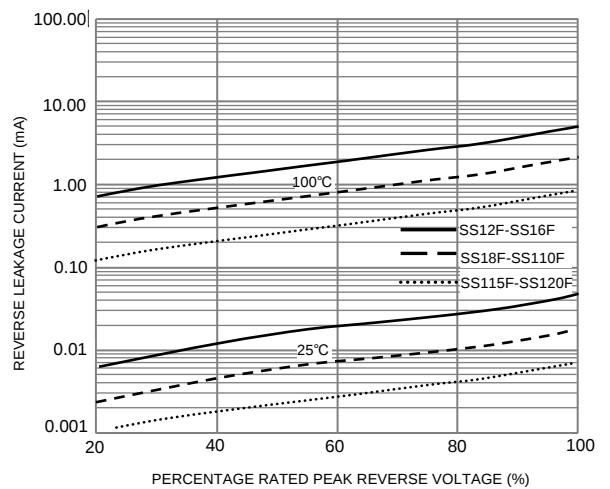


FIG. 5 – TYPICAL JUNCTION CAPACITANCE

