



## Surface Mount Low VF Schottky Rectifier

Reverse Voltage 20 to 40V  
Forward Current 3.0A

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low profile surface mount package
- Built-in strain relief
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 250°C/10 seconds at terminals
- Extremely Low VF

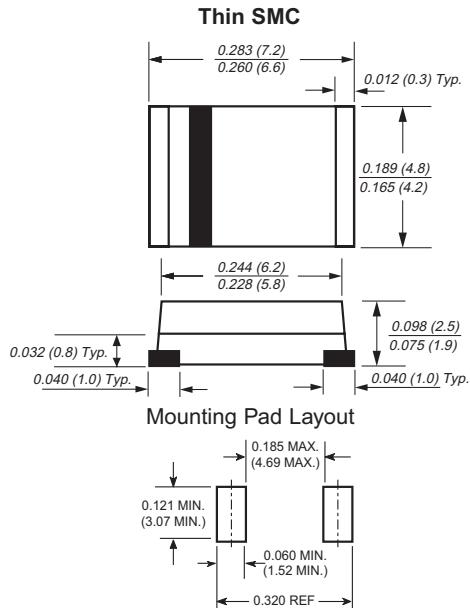
### Mechanical Data

**Case:** JEDEC DO-214AB molded plastic body

**Terminals:** Solder plated, solderable per MIL-STD750, Method 2026

**Polarity:** Color band denotes cathode end

**Weight:** 0.195 g



Dimensions in inches and (millimeters)

### Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

Parameter	Symbol	LS32F	LS34F	Unit
Device marking code		SL32	SL34	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	40	V
Maximum RMS voltage	V <sub>RMS</sub>	14	28	V
Maximum DC blocking voltage	V <sub>DC</sub>	20	40	V
Max. average forward rectified current at TL (See Fig. 1)	I <sub>F(AV)</sub>		3.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>		80	A
Typical thermal resistance <sup>(2)</sup>	R <sub>θJA</sub> R <sub>θJL</sub>		50 17	°C/W
Typical junction capacitance	C <sub>J</sub>		300	pF
Operating junction temperature range	T <sub>J</sub>		-55 to +125	°C
Storage temperature range	T <sub>STG</sub>		-55 to +150	°C

### Electrical Characteristics (TA = 25 °C unless otherwise noted)

Maximum instantaneous forward voltage at 3.0A <sup>(1)</sup>	V <sub>F</sub>	0.38	0.40	V
Maximum DC reverse current <sup>(1)</sup> at rated DC blocking voltage	T <sub>A</sub> = 25 °C T <sub>A</sub> = 100 °C	I <sub>R</sub>	1.0 10	mA

Notes: (1) Pulse test: 300μs pulse width, 1% duty cycle

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



## Ratings and Characteristic Curves

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

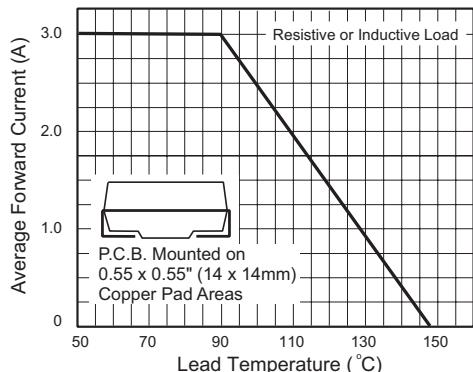


Fig. 3 - Typical Instantaneous Forward Characteristics

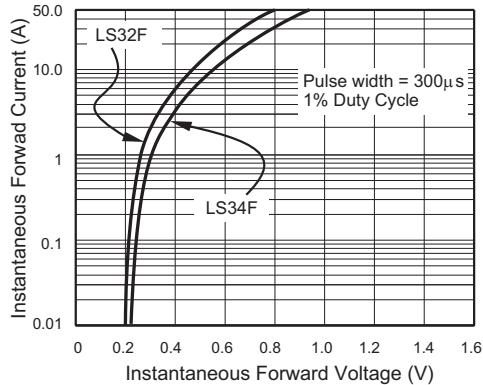


Fig. 5 - Typical Junction Capacitance

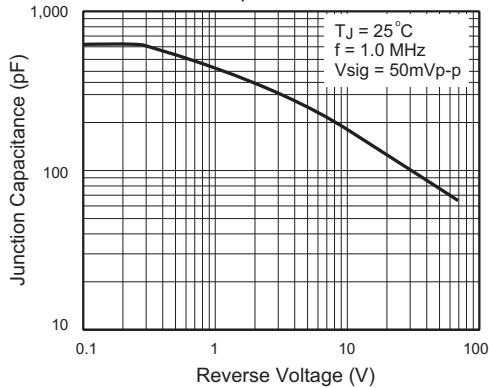


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

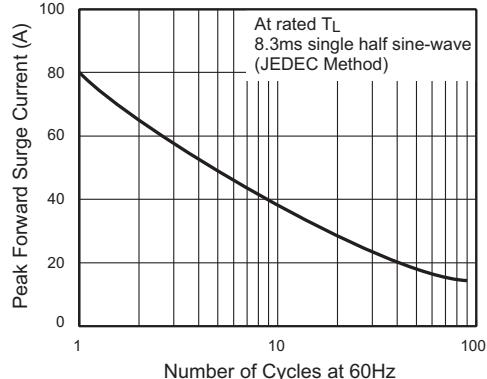


Fig. 4 - Typical Reverse Current Characteristics

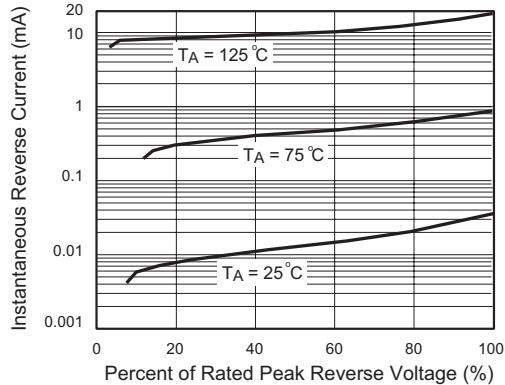


Fig. 6 - Maximum Non-repetitive Peak Forward Surge Current

