

# Preliminary SS8P100

## High Current Density Surface Mount Ultra Low VF Schottky Rectifier

### Description

The SS8P100 provides very low VF and excellent reverse leakage stability at high temperatures in TO-277A package. It is ideal for use as a rectifier, freewheel diode or blocking diode

### Features

- Very low profile - typical height of 1.1 mm
- Ideal for automated placement
- Low forward voltage drop, low power losses
- High efficiency
- Low thermal resistance
- Meets MSL level 1, per J-STD-020
- Solder dip 260 °C max. 10 s, per JESD 22-A111
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC

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- RoHS compliant package

### Application

- DC/DC Converters
- AC/DC Adaptors

### Mechanical Data

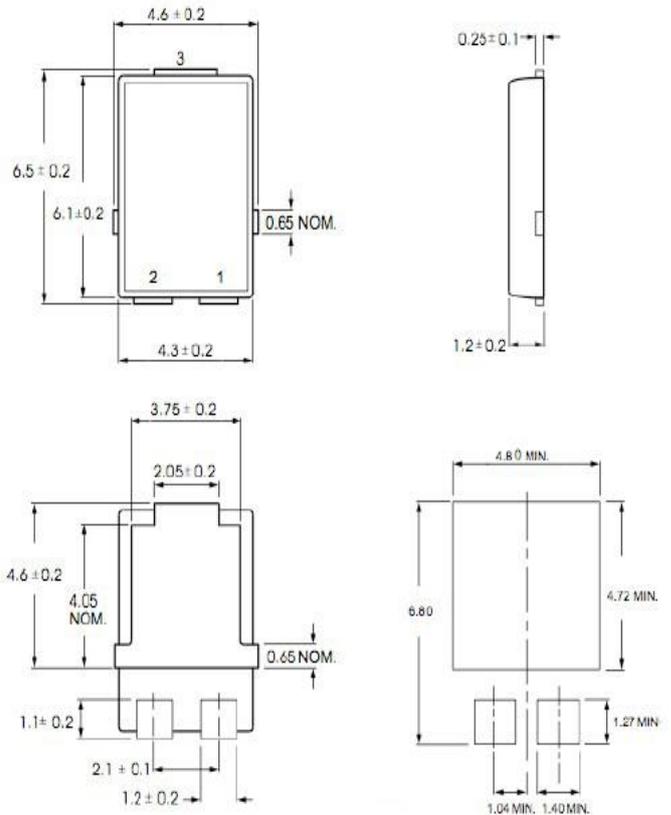
- Case: Conform to JEDEC TO-277A
- Molding compound meets UL 94 V-0 flammability

### Packing & Order Information

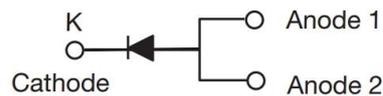
3,000/Reel



**RoHS**  
COMPLIANT



### Graphic symbol



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

### Maximum Ratings (Tc=25°C unless otherwise noted)

Parameter	Symbol	SS8PU100	Unit
Maximum repetitive peak reverse voltage	VRRM	100	V
Working peak reverse voltage	VRWM	100	V
Maximum DC blocking voltage	VDC	100	V
Maximum average forward rectified current	IF(AV)	8	A

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### Maximum Ratings (Tc=25°C unless otherwise noted)

Parameter	Symbol	SS8PU100	Unit
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	120	A
Non-repetitive avalanche energy at 25 °C IAS = 2 A per diode	EAS	20	m'J
Operating junction temperature range	TJ	-55 to +150	°C
Storage temperature range	TSTG	-55 to +150	°C

#### Note:

- (1) Mounted on 30 mm x 30 mm Al P.C.B. with 50 mm x 25 mm x 100 mm fin heat sink
- (2) Free air, mounted on recommended copper pad area

### Electrical characteristics (Tc=25°C unless otherwise noted)

Parameter	Symbol	Value		Unit
		Typical	Max	
Instantaneous forward voltage at IF=10A, Tj=25°C at IF=10A, Tj=125°C	VF	0.75 0.65	0.85	V
Maximum reverse current per leg Tj=25°C	IR	20		u'A
at working peak reverse voltage Tj=125°C		5		m'A

### Thermal characteristics (Tc=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Typical thermal resistance	RθJA	60	°C/W
	Rthjc	3	

#### Notes:

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle
- (2) Pulse test: Pulse width ≤ 40 ms

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### Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE

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