

## SD10PU100

High Current Density Surface Mount  
Ultra Low VF Schottky Rectifier

### Features

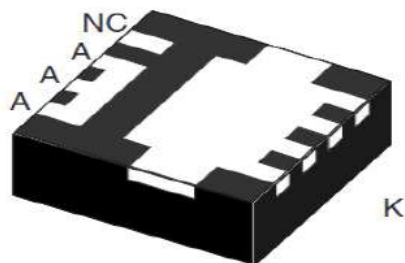
- Very low profile - typical height of 1.1 mm
- Ideal for automated placement
- Low forward voltage drop, low power losses
- High efficiency
- Low thermal resistance
- Meets MSL level 1, per J-STD-020
- Solder dip 260 °C max. 10 s, per JESD 22-A111
- RoHS compliant package

### Mechanical Data

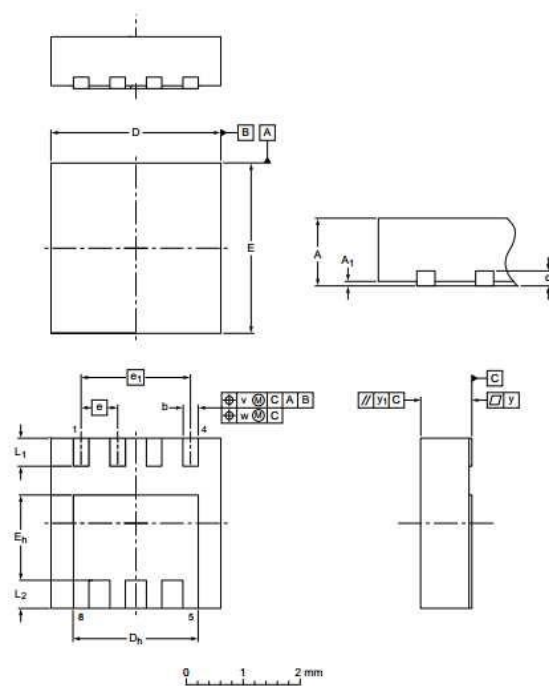
- Case: DFN 3.3X3.3
- Molding compound meets UL 94 V-0 flammability

### Packing & Order Information

3,000/Reel



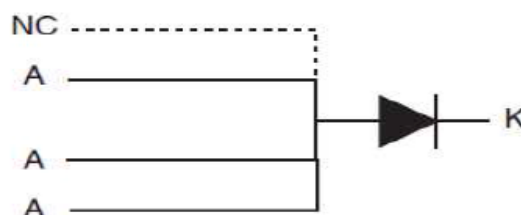
**RoHS  
COMPLIANT**



DIMENSIONS (mm are the original dimensions)

UNIT	A	A <sub>1</sub>	b	c	D	D <sub>h</sub>	E	E <sub>h</sub>	e	e <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>	v	w	y	y <sub>1</sub>
mm	1	0.05 0.00	0.45 0.25	0.2	3.4 3.2	2.4 2.2	3.4 3.2	1.80 1.58	0.65	1.95	0.55 0.45	0.52 0.35	0.1	0.05	0.1	0.1

Graphic symbol



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings (T<sub>c</sub>=25°C unless otherwise noted)

Parameter	Symbol	SD10PU100	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)	10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150	A

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

Parameter	Symbol	SD10PU100	Unit
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	0.68 0.60	0.73	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	

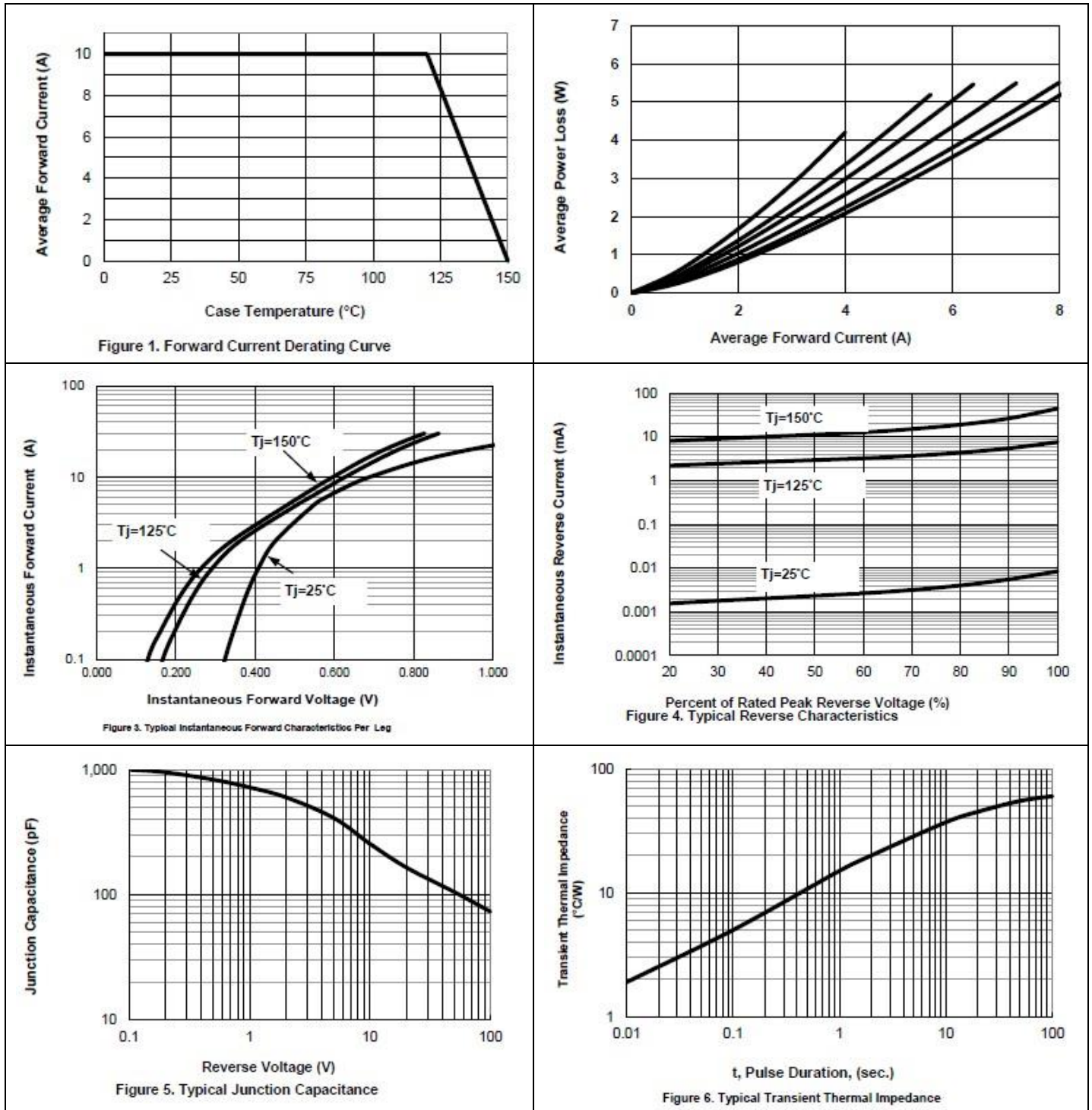
Notes:

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

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### CHARACTERISTICS CURVE



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### Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE

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