

#### **Product profile**

High Current Density Surface Mount Ultra Low VF

Schottky Rectifier

### **General description**

Rectifiers 10 Amp 80V

#### **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

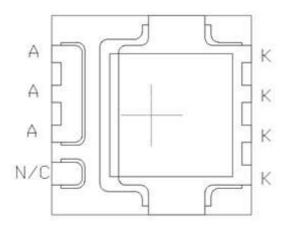
accordance to WEEE 2002/96/EC

#### Mechanical data

Case: **DFN 3.3X3.3** 

Molding compound meets UL 94 V-0 flammability

## DFN 3.3X3.3 X1.0mm





Maximum Ratings (Tc=25°C unless otherwise noted)								
Parameter		Symbol	SD10PU80	Unit				
Maximum repetitive peak reverse voltage		VRRM	80	V				
RMS Voltage (Max.)		VRMS	56	V				
Working peak reverse voltage		VRWM	80	V				
Maximum average forward rectified current	Total Device	IF(AV)	10	А				
Peak forward surge current								
8.3ms single half sine-wave superimposed		IFSM	100	A				
on rated load (JEDEC Method)								
Operating junction temperature range		TJ	-55 to +150	°C				
Storage temperature range		TSTG	-55 to +150	°C				

THERMAL CHARACTERISTICS						
Parameter	Symbol	Value	Unit			
Typical thermal resistance	RθJC	3	°C/W			

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

(2) Pulse test: Pulse width ≤ 40

Publication Order Number: SD10PU80



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

OFF CHARACTERISTICS

Parameter	Symbol	Value	Unit	
		Typical	Max	
Instantaneous forward voltage				
at IF=5A, Tj=25°C		0.51	0.55	
at IF=10A, Tj=25°C	VF	0.61	0.66	V
at IF=5A, Tj=125°C		0.44	0.47	
at IF=10A, Tj=125°C		0.56	0.61	
Maximum reverse current Tj=25°C	ID	50		u'A
at working peak reverse voltage Tj=125°C	lR IR	30		m'A

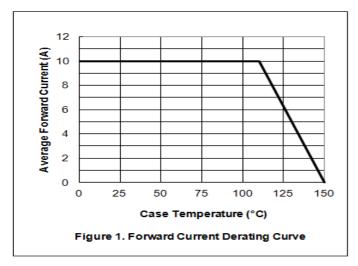
## **DEVICE MARK**

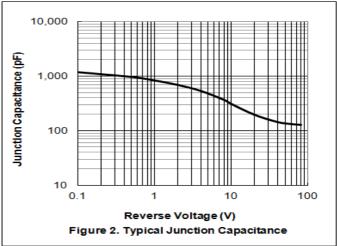
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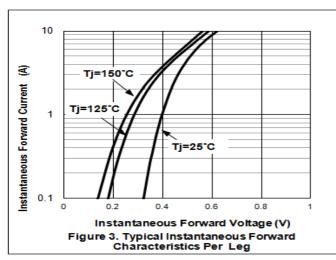
SD10PU80

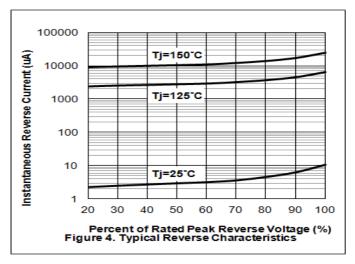


#### ■ Characteristic Curves











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