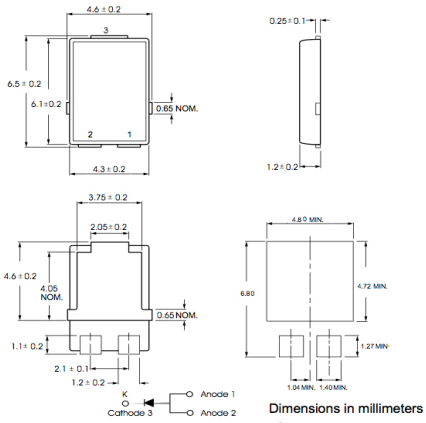
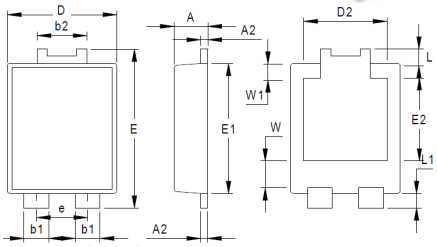
High Current Density Surface Mount Schottky Rectifier

SS10PU50/ A/B





NO	Dimensions	NO	Dimensions
A	1.20±0.1	e	1.84Typ
A2	0.25±0.05	E1	5.3±0.1
b1	0.9±0.1	E2	3.3±0.2
b2	1.8±0.1	L	0.6±0.1
D	3.95±0.1	L1	0.6±0.1
D2	3.00Typ	W	1.3±0.2
E	6.5±0.1	W1	0.8±0.15
All Dimensions in mm			

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: Conform to JEDEC TO-277A; Suffix /A

Industry TO-277B; Suffix /B

Molding compound meets UL 94 V-0 flammability

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

Parameter	Symbol	SS10PU50	Unit
Maximum repetitive peak reverse voltage	VRRM	50	V
Working peak reverse voltage	VRWM	30	V
Maximum DC blocking voltage	VDC	50	V
Maximum average forward rectified current Total device	IF(AV)	10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	200	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

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	 0.45 0.38	0.50	V
Maximum reverse current Tj=25°C	IR	150		u'A
at working peak reverse voltage Tj=125°C		50		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

Characteristics Curve