



SSC1065D

Silicon Carbide Schottky Diode

Features

- Negligible reverse recovery
- High-speed switching
- Positive temperature coefficient
- Temperature-independent switching
- Pb-free/RoHS compliant

Applications

- Switch mode power supply
- Solar inverter
- Data center
- Uninterruptible power supply

Marking:1065

Absolute Maximum Ratings

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

Parameter	Symbol	Limit	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	650	V
Continuous Forward Current@ $T_C=154^{\circ}\text{C}$	I_F	10	A
Non-repetitive Forward Surge Current ⁽¹⁾	I_{FSM}	96	A
Repetitive Peak Forward Surge Current ⁽¹⁾	I_{FRM}	85	A

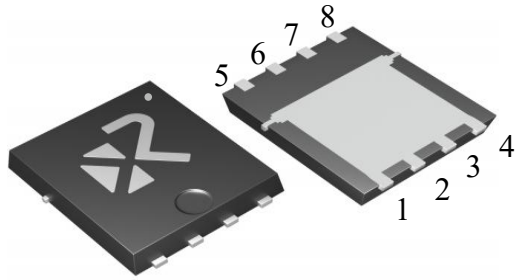
Note:(1)Tested condition: $t_p = 10\text{ms}$, Half sine pulse, $T_C=25^{\circ}\text{C}$

Electrical Characteristics ($T_C=25^{\circ}\text{C}$, unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
DC Blocking Voltage	V_{DC}	$I_R=50\mu\text{A}$	650			V
Reverse current	I_R	$V_R=650\text{V}$		5	60	μA
Forward voltage	V_F	$I_F=5\text{A}$		1.17		V
		$I_F=10\text{A}$		1.38	1.6	V

V_{RRM}	650V
I_F	10A($T_C=154^{\circ}\text{C}$)
Q_C	nC

Pin Configuration	
Pin NO.	Pin Name
1,2,3,4	Cathode
5,6,7	Anode
8	Floating



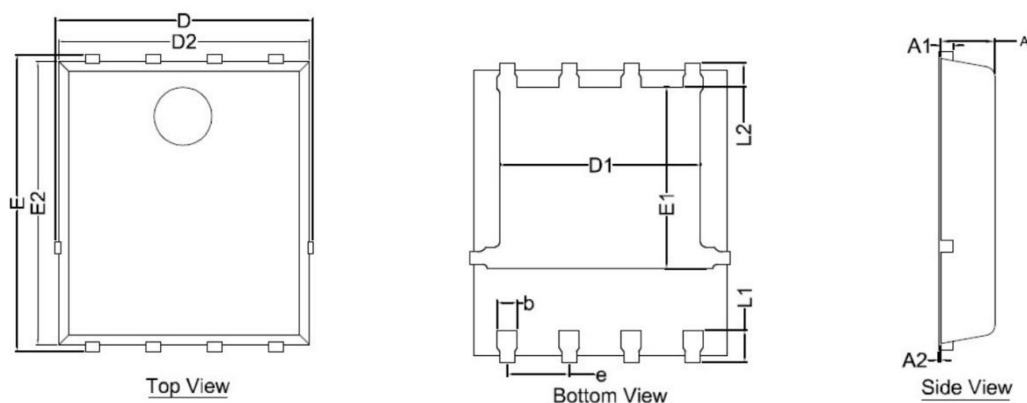
PDFN 5*6-8L



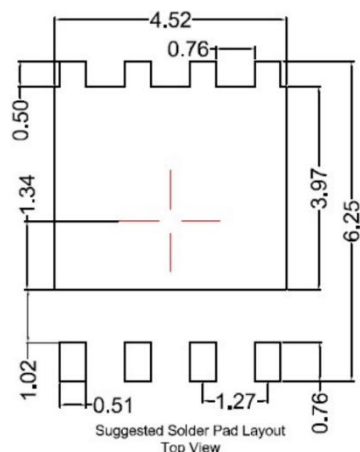
Package Information

PDFN5*6-8L

Dimensions in mm



Symbol	Millimeter		
	Min	Nom	Max
D	5.15	5.35	5.55
E	5.95	6.15	6.35
A	1.00	1.10	1.20
A1	0.254 BSC		
A2			0.10
D1	3.92	4.12	4.32
E1	3.52	3.72	3.92
D2	5.00	5.20	5.40
E2	5.66	5.86	6.06
L1	0.56	0.66	0.76
L2	0.50 BSC		
b	0.31	0.41	0.51
e		1.27 BSC	



Note:

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.10\text{mm}$
3. The pad layout is for reference purpose only



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