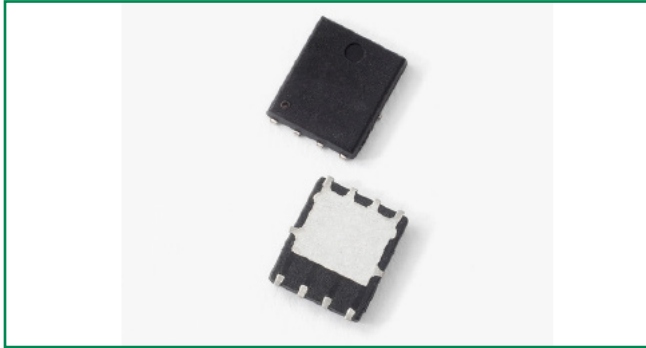
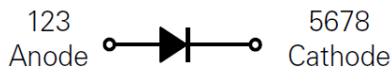


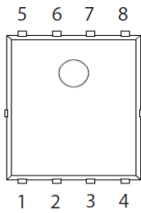
DST2060DJF



Schematic



Pin out



Pin	Function
1, 2, 3	Anode
4	Open
5, 6, 7, 8	Cathode

Description

Littelfuse DST series Ultra Low V_F Schottky Barrier Rectifier is designed to meet the general requirements of commercial and industry applications by providing high temperature, low leakage and lower V_F products.

It is suitable for high frequency switching mode power supply, free-wheeling diodes and polarity protection diodes.

Features

- Ultra low forward voltage drop
- High frequency operation
- High junction temperature capability
- Guard ring for enhanced ruggedness and long term reliability
- Single die in PDFNWB5x6-8L package

Applications

- Switching mode power supply
- DC/DC converters
- Free-Wheeling diodes
- Polarity Protection Diodes

Maximum Ratings

Parameters	Symbol	Test Conditions	Max	Unit
Peak Inverse Voltage	V_{RWM}	-	60	V
Average Forward Current (per device)	$I_{F(AV)}$	50% duty cycle @ $T_C = 80^\circ\text{C}$ rectangular wave form	20	A
Peak One Cycle Non-Repetitive Surge Current (per diode)	I_{FSM}	8.3 ms, half Sine pulse	150	A

Electrical Characteristics

Parameters	Symbol	Test Conditions	Max	Unit
Forward Voltage Drop (per diode)*	V_{F1}	@20A, Pulse, $T_J = 25^\circ\text{C}$	0.75	V
	V_{F2}	@20A, Pulse, $T_J = 125^\circ\text{C}$	0.70	
Reverse Current (per diode)*	I_{R1}	@ $V_R = \text{rated } V_R, T_J = 25^\circ\text{C}$	1	mA
	I_{R2}	@ $V_R = \text{rated } V_R, T_J = 125^\circ\text{C}$	40	

* Pulse Width < 300 μs , Duty Cycle < 2%

Thermal-Mechanical Specifications

Parameters	Symbol	Test Conditions	Max	Unit
Junction Temperature	T_J		-55 to +150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$
Typical Thermal Resistance Junction to Case (per diode)	R_{thJC}	DC operation	2.6	$^\circ\text{C/W}$
Approximate Weight	wt		0.095	g
Case Style		PDFNWB5x6-8L		

Figure 1: Typical Forward Characteristics

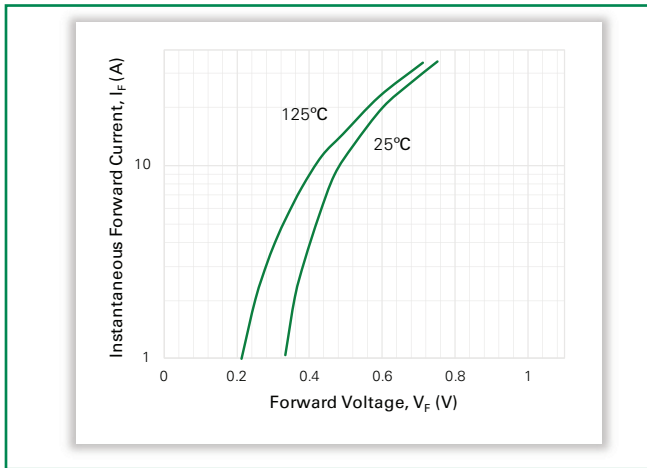


Figure 2: Typical Reverse Characteristics

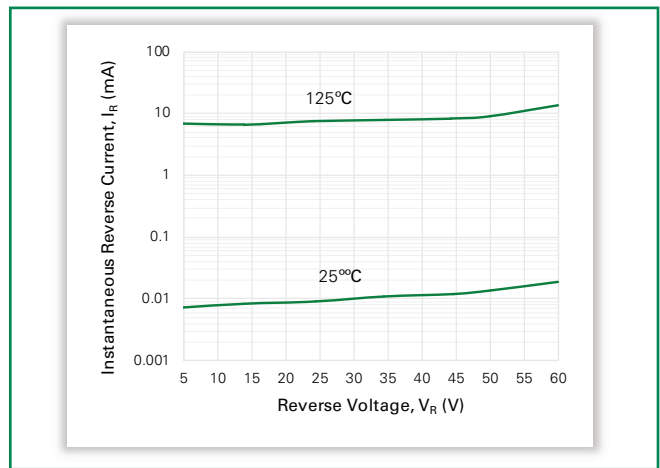
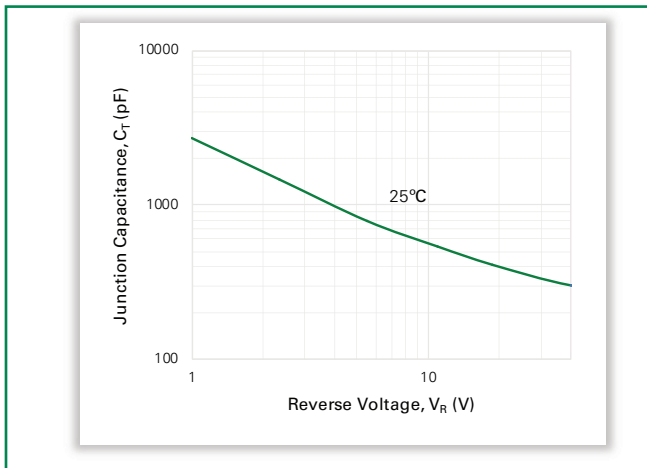
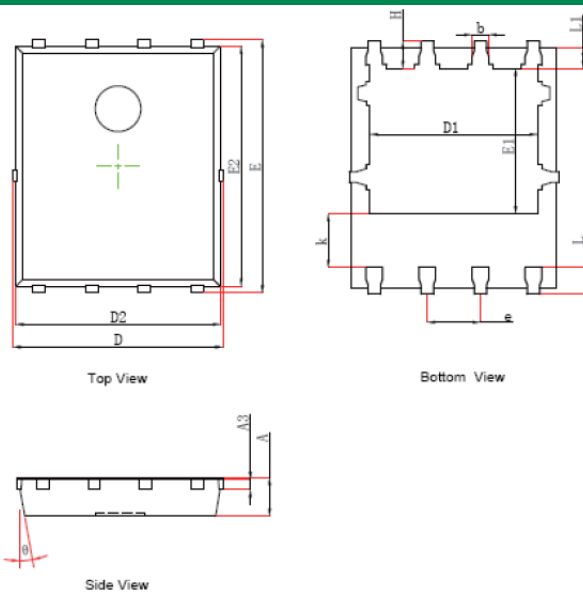


Figure 3: Typical Junction Capacitance

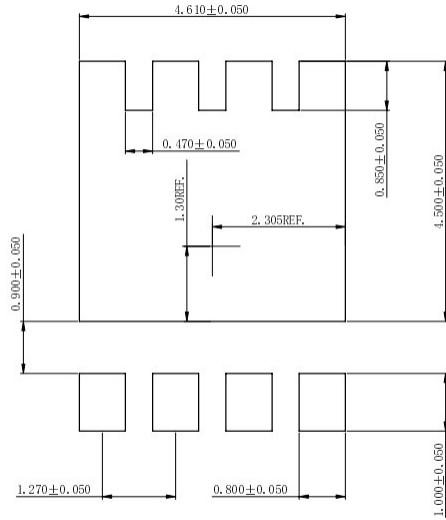


Dimensions-PDFNWB5x6-8L



Symbol	Millimeters	
	Min	Max
A	0.900	1.000
A3	0.254 REF	
D	4.944	5.096
E	5.974	6.126
D1	3.910	4.110
E1	3.375	3.575
D2	4.824	4.976
E2	5.674	5.826
k	1.190	1.390
b	0.350	0.450
e	1.27 TYP	
L	0.559	0.711
L1	0.424	0.576
H	0.574	0.726
θ	10°	12°

Soldering Footprint



Dimensions: Millimeters

Part Numbering and Marking System

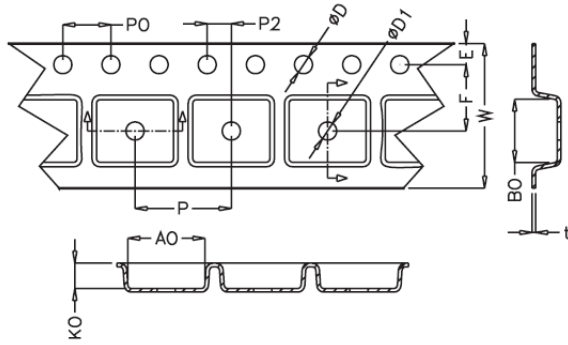


- DST = Device Type
- 20 = Forward Current (20A)
- 60 = Reverse Voltage (60V)
- DJF = Package Type
- LF = Littelfuse
- YY = Year
- WW = Week
- L = Lot Number

Packing Options

Part Number	Marking	Packing Mode	M.O.Q
DST2060DJF	DST2060DJF	3000pcs / Reel	3000

Carrier Tape & Reel Specification



Symbol	Millimeters	
	Min	Max
A0	6.20	6.40
B0	5.20	5.40
D	1.50	1.60
D1	1.5	1.75
E	1.65	1.85
F	5.45	5.55
K0	1.00	1.20
P	7.90	8.10
P0	3.90	4.10
P2	1.95	2.05
W	11.90	12.30
t	0.23	0.27

REACH (SVHC) Declaration

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

Product Series/ Part Number	Annex 1b
DST2060DJF	Lead (7439-92-1)

The product series/ part number(s) shown above contain substance(s) listed in Annex 1b, in a concentration above 0.1% by weight per article, meeting the criteria in Article 57 and identified in accordance with Article 59(1) of Regulation (EC) 1907/2006 (the REACH regulation), last updated on **10th of June 2022**.

There are currently 224 entries on the Candidate List of substances of very high concern (SVHC). SVHCs are identified on the European Chemical Agency (ECHA) website and can be viewed at <https://echa.europa.eu/candidate-list-table>.

This declaration does not modify or alter the terms of any contract or purchase agreement that exists between Littelfuse, Inc. and the purchaser of said parts. Further, I certify that I am authorized to make the representations provided in this compliance certification on behalf of my company.

Issued by:



Jennilyn Dinglasan-Santos

Global PEC Sr. Supervisor

Email: jdinglasan@littelfuse.com

Date: August 22, 2022

This information represents actual knowledge based on the information provided by our component and/or raw material suppliers.

If you require further information, feel free to contact us via email at envrequests@littelfuse.com or call +63 43 430 0100 loc. 248 or 284



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CERTIFICATE OF COMPLIANCE

Restriction of Hazardous Substances (RoHS)

Product Series/ Part Number	Exemption/s Used
DST2060DJF	7a

This is to certify that product series/ part number listed above:

- Do not contain lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), or polybrominated diphenyl ethers (PBDE) above the indicated thresholds set forth in RoHS 2 Directive 2011/65/EU except when an applicable and valid EU RoHS exemption stipulated in the Annex III of the directive is specified. And,
- Do not contain Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) above the indicated thresholds set forth in Directive (EU) 2015/863.

This certification does not modify or alter the terms of any contract or purchase agreement that exists between Littelfuse, Inc. and the purchaser of said parts. Further, I certify that I am authorized to make the representations provided in this compliance certification on behalf of my company.

Issued by:

Jennilyn Dinglasan-Santos
Sr. Global PEC Supervisor
Email: JDinglasan@Littelfuse.com

Date: August 22, 2022

This information represents actual knowledge based on the information provided by our component and/or raw material suppliers.

If you require further information, feel free to contact us via email at envrequests@littelfuse.com