

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



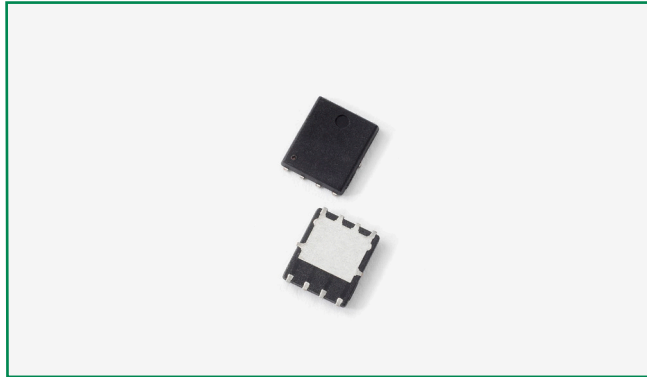
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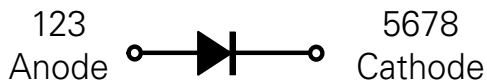
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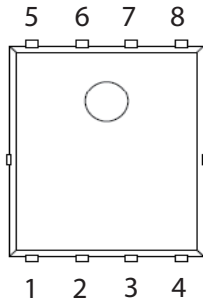
DST2060DJF



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	°C
Storage Temperature	T_{stg}		-55 to +150	°C
Typical Thermal Resistance Junction to Case (per diode)	R_{thJC}	DC operation	2.6	°C/W
Approximate Weight	wt		0.095	g
Case Style	PDFNWB5x6-8L			

Figure 1: Typical Forward Characteristics

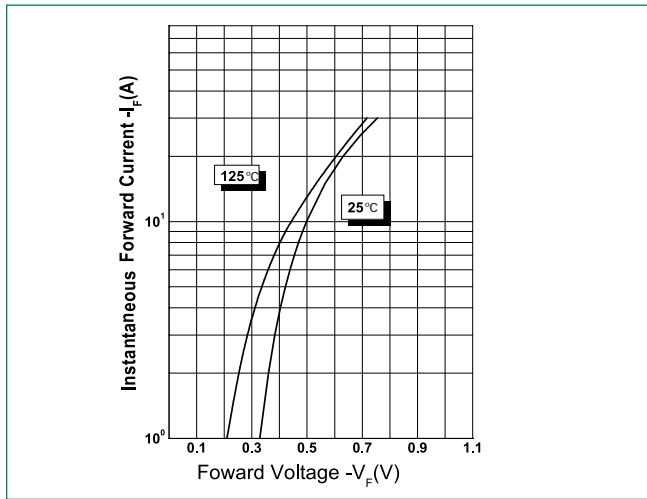


Figure 2: Typical Reverse Characteristics

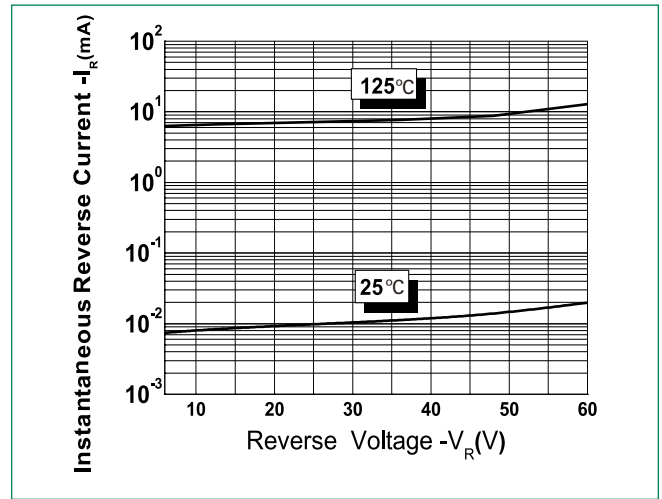
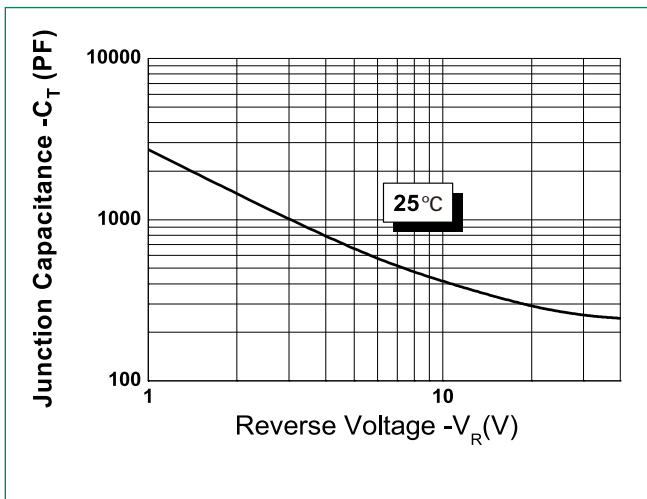
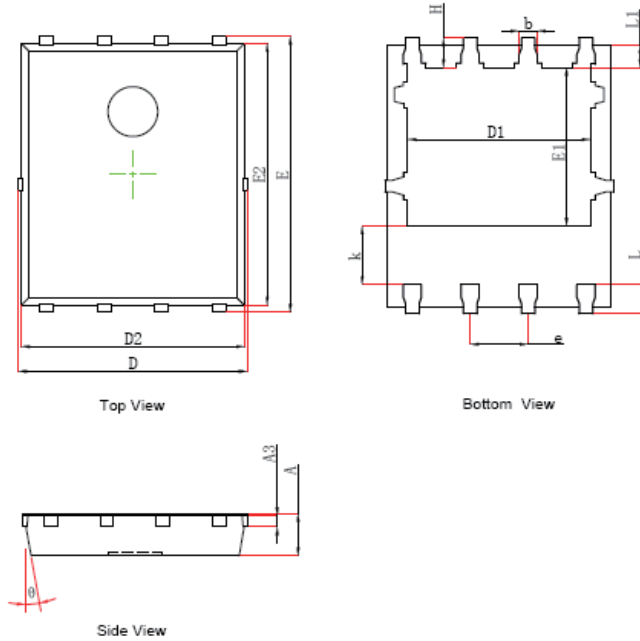


Figure 3: Typical Junction Capacitance

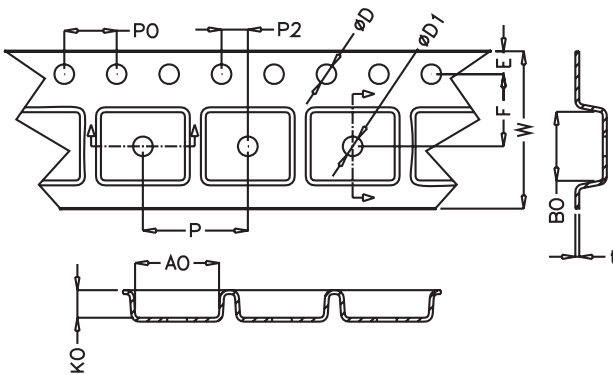


Dimensions- PDFNWB5x6-8L



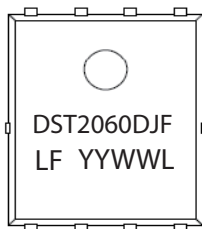
Symbol	Millimeters	
	Min	Max
A	0.900	1.000
A3	0.254 REF	
D	4.944	5.096
E	5.974	6.126
D1	3.910	4.110
E1	3.375	3.575
D2	4.824	4.976
E2	5.674	5.826
k	1.190	1.390
b	0.350	0.450
e	1.27 TYP	
L	0.559	0.711
L1	0.424	0.576
H	0.574	0.726
θ	10°	12°

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

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