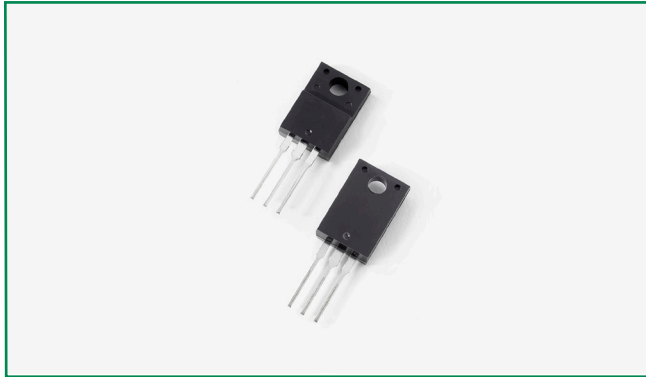
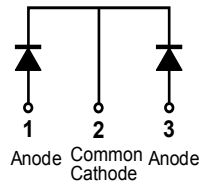


**DSTF40150C**



**Pin out**



**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
- Common cathode configuration in ITO-220AB 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	$V_{RWM}$	-	150	V
Average Forward Current	$I_{F(AV)}$	50% duty cycle @ $T_C = 70^\circ\text{C}$ rectangular wave form	20 (per leg)	A
			40 (total device)	
Peak One Cycle Non-Repetitive Surge Current (per leg)	$I_{FSM}$	8.3 ms, half Sine pulse	250	A

**Electrical Characteristics**

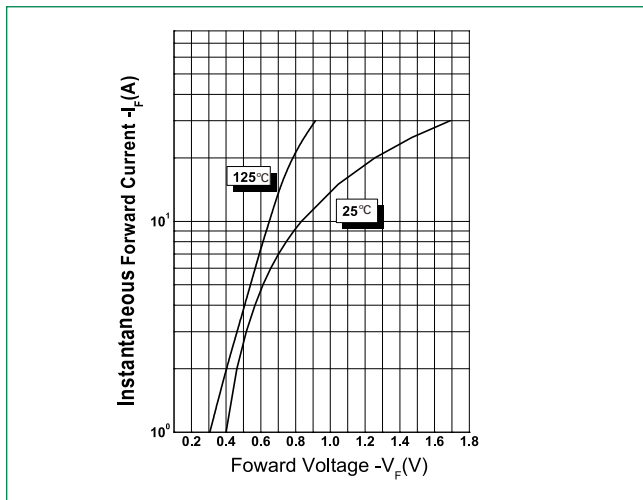
Parameters	Symbol	Test Conditions	Typ	Max	Unit
Forward Voltage Drop (per leg) *	$V_{F1}$	@5A, Pulse, $T_J = 25^\circ\text{C}$	0.65	-	V
		@10A, Pulse, $T_J = 25^\circ\text{C}$	0.84	-	
		@20A, Pulse, $T_J = 25^\circ\text{C}$	1.26	1.43	
	$V_{F2}$	@5A, Pulse, $T_J = 125^\circ\text{C}$	0.54	-	
		@10A, Pulse, $T_J = 125^\circ\text{C}$	0.65	-	
		@20A, Pulse, $T_J = 125^\circ\text{C}$	0.78	0.82	
Reverse Current (per leg) *	$I_{R1}$	@ $V_R = \text{rated } V_R, T_J = 25^\circ\text{C}$	0.007	0.25	mA
	$I_{R2}$	@ $V_R = \text{rated } V_R, T_J = 125^\circ\text{C}$	3	25	
Junction Capacitance (per leg)	$C_T$	@ $V_R = 5V, T_C = 25^\circ\text{C}, f_{SIG} = 1\text{MHz}$	835	-	pF
RSM Isolation Voltage ( $t = 1.0$ second, R. H. $\leq 30\%$ , $T_A = 25^\circ\text{C}$ )	$V_{ISO}$	Clip mounting, the epoxy body away from the heatsink edge by more than 0.110" along the lead direction.	-	4500	V
		Clip mounting, the epoxy body is inside the heatsink.	-	3500	
		Screw mounting, the epoxy body is inside the heatsink.	-	1500	

\* Pulse Width < 300 $\mu\text{s}$ , Duty Cycle < 2%

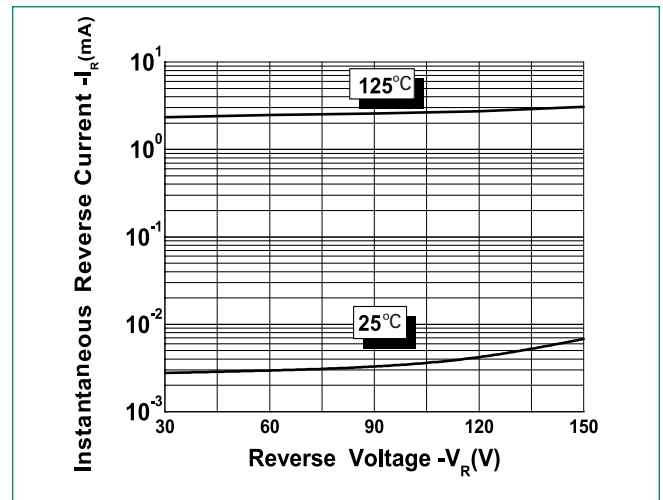
**Thermal-Mechanical Specifications**

Parameters	Symbol	Test Conditions	Max	Unit
Junction Temperature	$T_J$		-55 to +150	°C
Storage Temperature	$T_{stg}$		-55 to +150	°C
Thermal Resistance Junction to Case (per leg)	$R_{thJC}$	DC operation	4.0	°C/W
Approximate Weight	wt		2	g
Case Style		ITO-220AB		

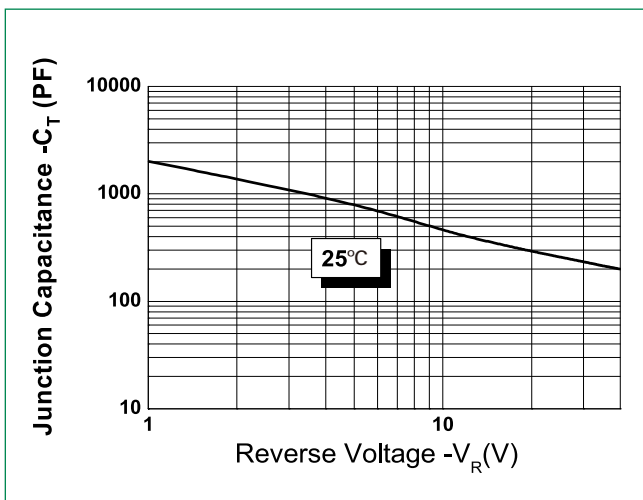
**Figure 1: Typical Forward Characteristics**



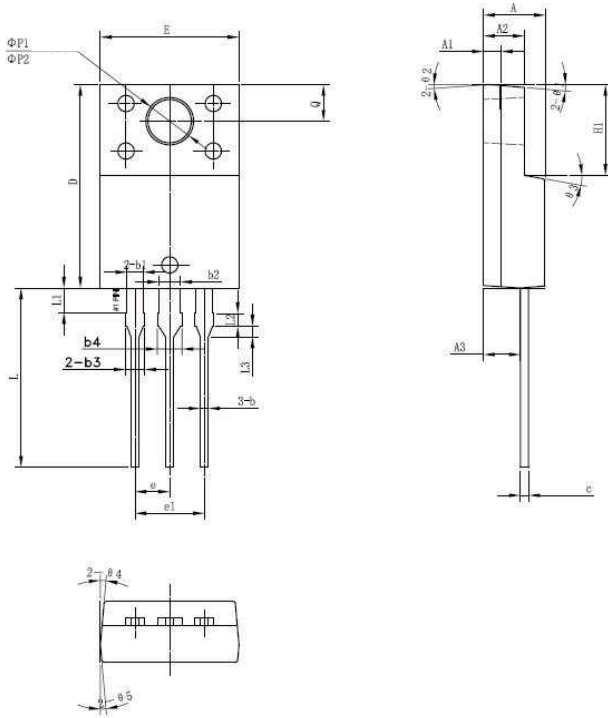
**Figure 2: Typical Reverse Characteristics**



**Figure 3: Typical Junction Capacitance**



**Dimensions- ITO-220AB**

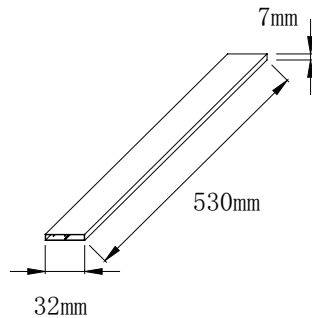


Symbol	Millimeters		
	Min	Typ	Max
A	4.30	4.50	4.70
A1	1.10	1.30	1.50
A2	2.80	3.00	3.20
A3	2.50	2.70	2.90
b	0.50	0.60	0.75
b1	1.10	1.20	1.35
b2	1.50	1.60	1.75
b3	1.20	1.30	1.45
b4	1.60	1.70	1.85
c	0.50	0.60	0.75
D	14.80	15.00	15.20
E	9.96	10.16	10.36
e	-	2.55	-
e1	-	5.10	-
H1	6.50	6.70	6.90
L	12.70	13.20	13.70
L1	1.60	1.80	2.00
L2	0.80	1.00	1.20
L3	0.60	0.80	1.00
ØP1	3.30	3.50	3.70
ØP2	2.99	3.19	3.39
Q	2.50	2.70	2.90
01	-	5°	-
02	-	4°	-
03	-	10°	-
04	-	5°	-
05	-	5°	-

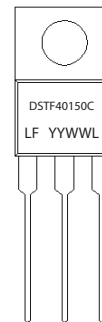
**Packing Options**

Part Number	Marking	Packing Mode	M.O.Q
DSTF40150C	DSTF40150C	50 pcs / Tube	20000

**Tube Specification**



**Part Numbering and Marking System**



DST = Device Type  
 F = Package type  
 40 = Forward Current (40A)  
 150 = Reverse Voltage (150V)  
 C = Configuration  
 LF = Littelfuse  
 YY = Year  
 WW = Week  
 L = Lot Number

**Disclaimer Notice**

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Part of:

