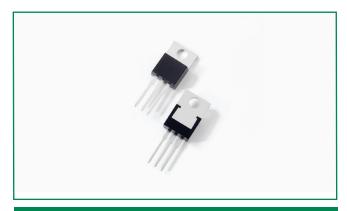
Schottky Barrier Rectifier DST20150C, 2x 10A, 150V, TO-220AB, Common Cathode

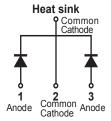
DST20150C







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
- High frequency operation
- High junction temperature capability
- Guard ring for enhanced ruggedness and long term reliability
- Common cathode configuration in TO-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 =105°C rectangular wave form	10 (per leg)	_
Average For Ward Current			20 (total device)	
Peak One Cycle Non-Repetitive Surge Current (per leg)	I _{FSM}	8.3 ms, half Sine pulse	150	А

Electrical Characteristics

Parameters	Symbol	Symbol Test Conditions		Max	Unit	
Forward Voltage Drop (per leg) *	V _{F1}	@5A, Pulse, T _J = 25 °C	0.70	-		
		@10A, Pulse, T _J = 25 °C	1.02	1.20	V	
	V _{F2}	@5A, Pulse, T _J = 125 °C	0.61	-		
		@10A, Pulse, T _J = 125 °C	0.76	0.80		
Reverse Current (per leg) *	I _{R1}	$@V_R = rated V_R T_J = 25 °C$	-	0.15	mA	
	I _{R2}	$@V_R = rated V_R T_J = 125 °C$	4	15	IIIA	
Junction Capacitance (per leg)	C _T	$@V_R = 5V, T_C = 25 ^{\circ}C, f_{SIG} = 1MHz$	447	-	pF	

^{*} Pulse Width < 300µs, Duty Cycle <2%

Schottky Barrier Rectifier DST20150C, 2x 10A, 150V, TO-220AB, Common Cathode

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	2.8	°C/W
Approximate Weight	wt		2	g
Case Style		TO-220AB		

Figure 1: Typical Forward Characteristics

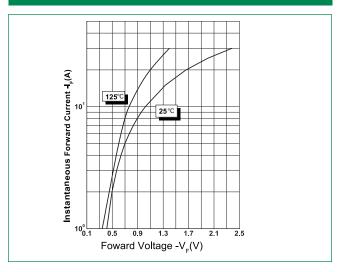


Figure 2: Typical Reverse Characteristics

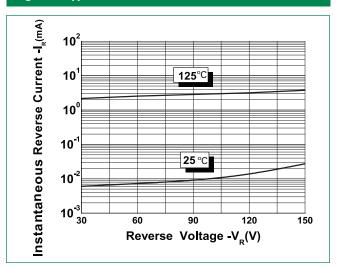
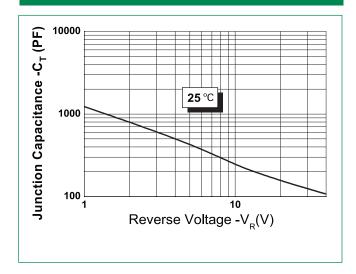
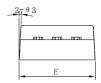


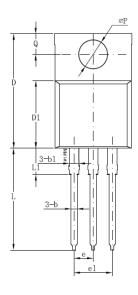
Figure 3: Typical Junction Capacitance

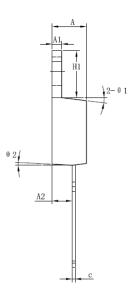


Schottky Barrier Rectifier DST20150C, 2x 10A, 150V, TO-220AB, Common Cathode

Dimensions-TO-220AB







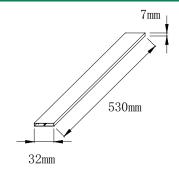
Symbol	Millimeters			
Зутпрог	Min	Max		
Α	3.56	4.83		
A1	0.51	1.40		
A2	2.03	2.92		
b	0.38	1.02		
b1	1.14	1.78		
С	0.31*	0.61		
D	14.22	16.51		
D1	8.38	9.15*		
E	9.65	10.67		
е	2.54	-		
e1	4.98*	-		
H1	5.84	6.86		
L	12.70	14.73		
L1	-	6.35		
ØΡ	3.53	4.09		
Q	2.54	3.43		

Footnote *: The spec. does not comply with JEDEC spec.

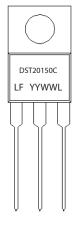
Packing Options

Part Number	Marking	Packing Mode	M.O.Q	
DST20150C	DST20150C	50pcs / Tube	1000	

Tube Specification



Part Numbering and Marking System



DST = Device Type
20 = Forward Current (20A)
150 = Reverse Voltage (150V)
C = Configuration
LF = Littelfuse
YY = Year
WW = Week
L = Lot Number