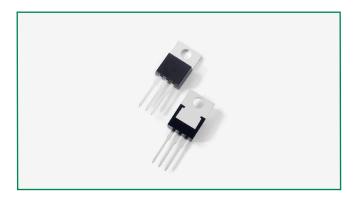
Schottky Barrier Rectifier MBR10150CT 2x 5A, 150V, TO-220AB Common Cathode

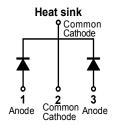
MBR10150CT







Pin out



Description

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

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

Features

- High junction temperature capability
- Guard ring for enhanced ruggedness and long term reliability
- Low forward voltage drop
- High frequency operation
- Common cathode configuration in TO-220AB package

Applications

- Switching mode power supply
- Free-wheeling diodes
- DC/DC converters
- 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	5 (per leg)	A
Average For Ward Current			10 (total device)	
Peak One Cycle Non-Repetitive Surge Current (per leg)	I _{FSM}	8.3 ms, half Sine pulse	138	А

Electrical Characteristics

Parameters	Symbol Test Conditions		Max	Unit	
Forward Voltage Drop (per leg) *	V _{F1}	@5A, Pulse, T _J = 25 °C		V	
Torward voitage Drop (per leg)	V_{F2}	@5A, Pulse, T _J = 125 °C	0.73	V	
Reverse Current (per leg) *	I _{R1}	$@V_R = rated V_R T_J = 25 °C$	1.0	- mA	
	I _{R2}	$@V_R = rated V_R T_J = 125 °C$	7.0		
Junction Capacitance (per leg)	C _T	$@V_R = 5V, T_C = 25 ^{\circ}C f_{SIG} = 1MHz$	200	pF	
Series Inductance (per leg) L _s Measure		Measured lead to lead 5 mm from package body	8.0	nH	
Voltage Rate of Change	dv/dt		10,000	V/µs	

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

Schottky Barrier Rectifier MBR10150CT 2x 5A, 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
Maximum Thermal Resistance Junction to Case (per leg)	R _{thJC}	DC operation	4.5	°C/W
Approximate Weight	wt		2	g
Case Style	TO-220AB			

Figure 1: Typical Forward Characteristics

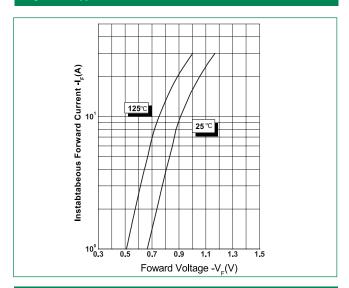


Figure 3: Typical Junction Capacitance

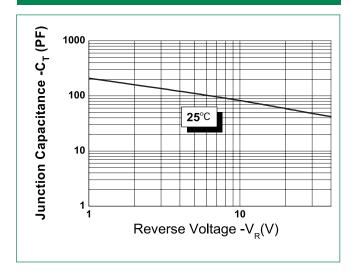
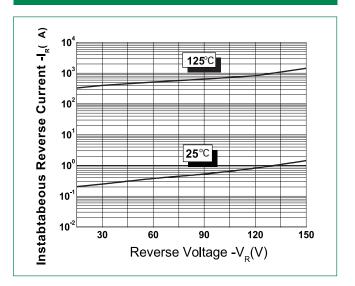
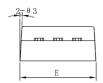


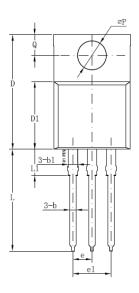
Figure 2: Typical Reverse Characteristics

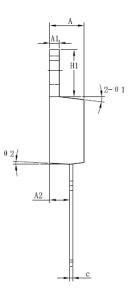


Schottky Barrier Rectifier MBR10150CT 2x 5A, 150V, TO-220AB Common Cathode

Dimensions-TO-220AB







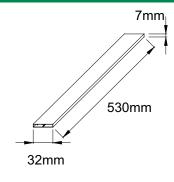
Symbol	Millimeters		
	Min	Max	
Α	3.56	4.83	
A1	0.51	1.40	
A2	2.03	2.92	
b	0.38	1.02	
b1	1.14	1.78	
С	0.31*	0.61	
D	14.22	16.51	
D1	8.38	9.15*	
E	9.65	10.67	
е	2.54	-	
e1	4.98*	-	
H1	5.84	6.86	
L	12.70	14.73	
L1	-	6.35	
øΡ	3.53	4.09	
Q	2.54	3.43	

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

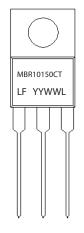
Packing Options

Part Number	Marking	Packing Mode	M.O.Q	
MBR10150CT	MBR10150CT	50pcs / Tube	1000	

Tube Specification



Part Numbering and Marking System



MBR = Device Type
10 = Forward Current (10A)
150 = Reverse Voltage (150V)
CT = Configuration
LF = Littlefluse
YY = Year
WW = Week
L = Lot Number