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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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**MBR10150CTP** 

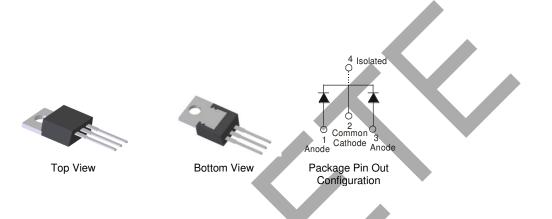
#### **10A SCHOTTKY BARRIER RECTIFIER**

#### **Features**

- Low Forward Voltage Drop
- Soft, Fast Switching Capability
- Schottly Barrier Chip
- ITO-220S Heat Sink Tab Electrically Isolated from Cathode
- UL Approval in Accordance with UL 1557, Reference No. E94661

### **Mechanical Data**

- Case: ITO-220S
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208 (3)
- Weight: 1.335 grams (approximate)

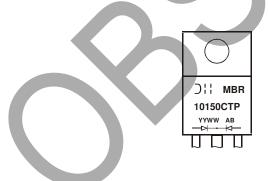


### **Ordering Information** (Note 1)

Part Number	Case	Packaging
MBR10150CTP	ITO-220S	50 pieces/tube

Notes: 1. For packaging details, go to our website at http://www.diodes.com.

# **Marking Information**



MBR10150CTP = Product Type Marking Code AB = Foundry and Assembly Code YYWW = Date Code Marking YY = Last two digits of year (ex: 08 = 2008) WW = Week (01 - 53)



## Maximum Ratings (Per Leg) @TA = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitance load, derate current by 20%.

Characteristic		Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V <sub>RRM</sub> V <sub>RWM</sub> V <sub>RM</sub>	150	V
Average Rectified Output Current	(Per Leg) (Total)	lo	5 10	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I <sub>FSM</sub>	105	A
Isolation Voltage From Terminal Heatsink t = 1 min.		$V_{AC}$	2000	V

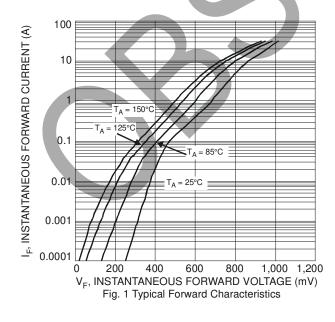
## **Thermal Characteristics (Per Leg)**

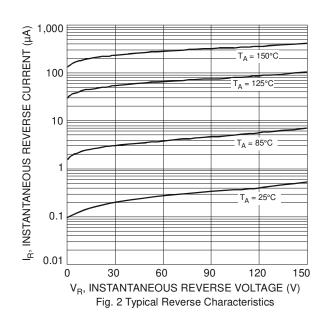
Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Case	$R_{ heta}$ JC	3	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175	°C

### Electrical Characteristics (Per Leg) @TA = 25°C unless otherwise specified

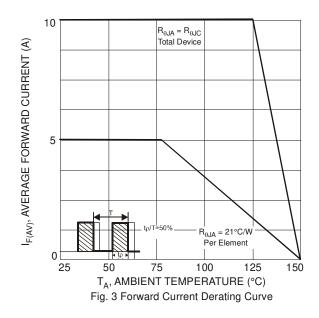
Characteristic		Symbol	I	lin	Тур	Max	Unit	Test Condition
Forward Voltage Drop		V <sub>F</sub>		-	-	0.91	ı v	$I_F = 5A, T_J = 25^{\circ}C$
Tolward Voltage Drop				-	-	0.75		$I_F = 5A, T_J = 125^{\circ}C$
Leakage Current (Note 2)		IR		-	-	0.05	ı ma	$V_R = 150V, T_J = 25^{\circ}C$
Leakage Current (Note 2)				-	-	20		V <sub>R</sub> = 150V, T <sub>J</sub> = 125°C

Notes: 2. Short duration pulse test used to minimize self-heating effect.

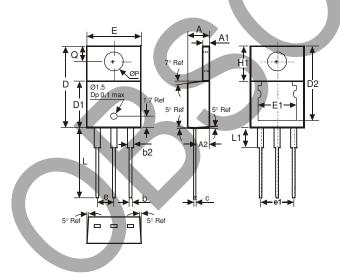








# **Package Outline Dimensions**



ITO-220S						
DIM.	MIN.	MAX.	TYP.			
A	4.52	4.62	4.57			
A1	1.17	1.39	_			
A2	2.57	2.77	2.67			
Ь	0.72	0.95	0.84			
b2	1.15	1.54	1.26			
С	0.356	0.61	_			
D	14.22	16.51	15.00			
D1	8.60	8.80	8.70			
D2	13.68	14.08	_			
е	2.49	2.59	2.54			
e1	4.98	5.18	5.08			
Е	10.01	10.21	10.11			
E1	6.86	8.89	_			
H1	5.85	6.85	_			
L	13.30	13.90	13.60			
L1		4.00				
Р	3.54	4.08	_			
Q	2.54	3.42	_			
All Dimensions in mm						



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