

MBR10150CTP

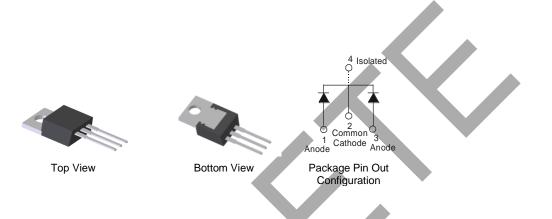
10A SCHOTTKY BARRIER RECTIFIER

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)

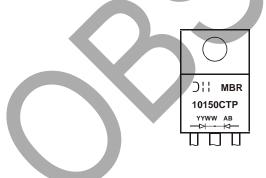


Ordering Information (Note 1)

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) @T_A = 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 _{RRM} V _{RWM} V _{RM}	150	٧	
Average Rectified Output Current	(Per Leg) (Total)	Io	5 10	A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I _{FSM}	105	A	
Isolation Voltage From Terminal Heatsink t = 1 min.		V_{AC}	2000	V	

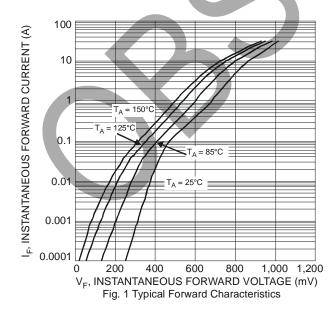
Thermal Characteristics (Per Leg)

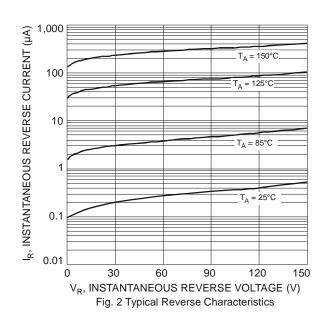
Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Case	$R_{ heta JC}$	3	°C/W
Operating and Storage Temperature Range	T_{J}, T_{STG}	-65 to +175	°C

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

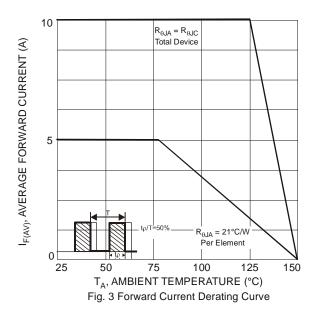
Characteristic	Symbol	M	in	Тур	Max	Unit	Test Condition
Forward Voltage Drop	VE			-	0.91	V	$I_F = 5A, T_J = 25^{\circ}C$
	VF			-	0.75		$I_F = 5A, T_J = 125^{\circ}C$
Leakage Current (Note 2)	I _R			-	0.05	ı ma	$V_R = 150V, T_J = 25^{\circ}C$
		-		-	20		$V_R = 150V, T_J = 125^{\circ}C$

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

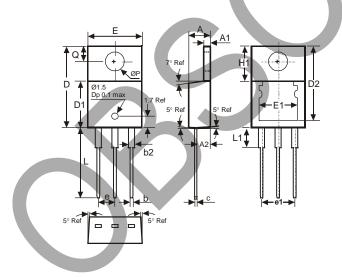








Package Outline Dimensions



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		
b	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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