PART OBSOLETE - NO EXACT ALTERNATE PART. USE MBR10150 of other available packages.

MBR10150CTP

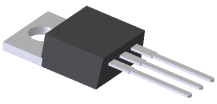
10A SCHOTTKY BARRIER RECTIFIER

Features

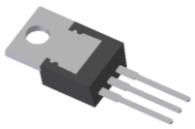
- Low Forward Voltage Drop
- Soft, Fast Switching Capability
- Schottly Barrier Chip
- ITO-220S Heat Sink Tab Electrically Isolated from Cathode
- UL Approval in Accordance with UL 1557, Reference No. E94661

Mechanical Data

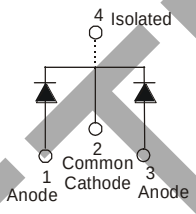
- Case: ITO-220S
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208 e3
- Weight: 1.335 grams (approximate)



Top View



Bottom View



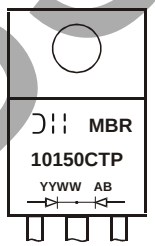
Package Pin Out Configuration

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	V
Average Rectified Output Current	(Per Leg)	I_O	5	A
	(Total)		10	
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	$R_{\theta JC}$	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	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	V_F	-	-	0.91	V	I_F = 5A, T_J = 25ºC
		-	-	0.75		I_F = 5A, T_J = 125ºC
Leakage Current (Note 2)	I_R	-	-	0.05	mA	V_R = 150V, T_J = 25ºC
		-	-	20		V_R = 150V, T_J = 125ºC

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

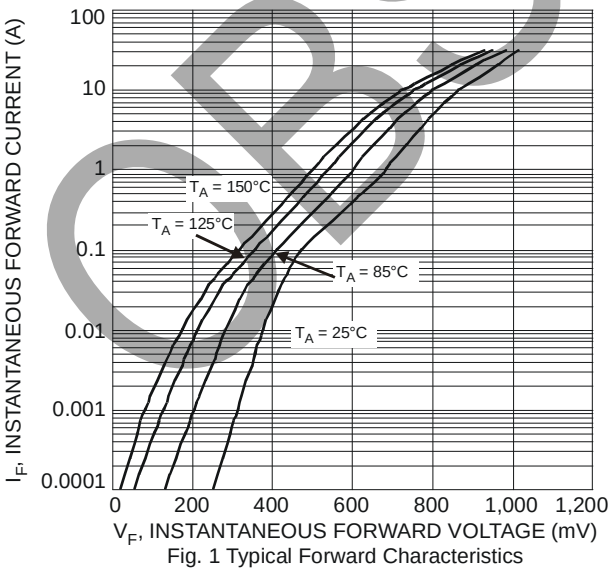


Fig. 1 Typical Forward Characteristics

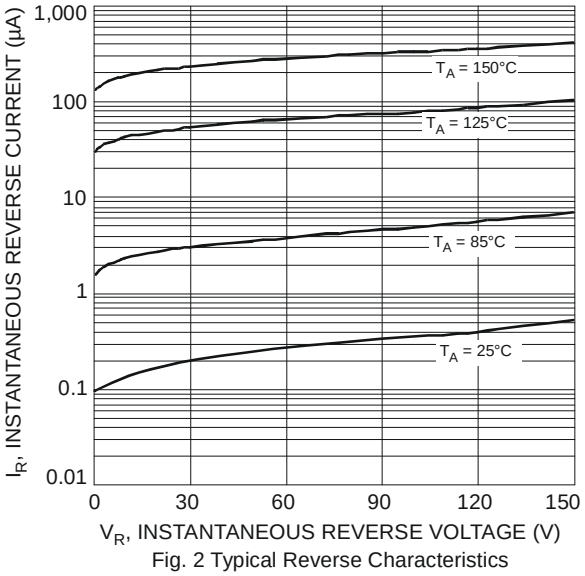


Fig. 2 Typical Reverse Characteristics

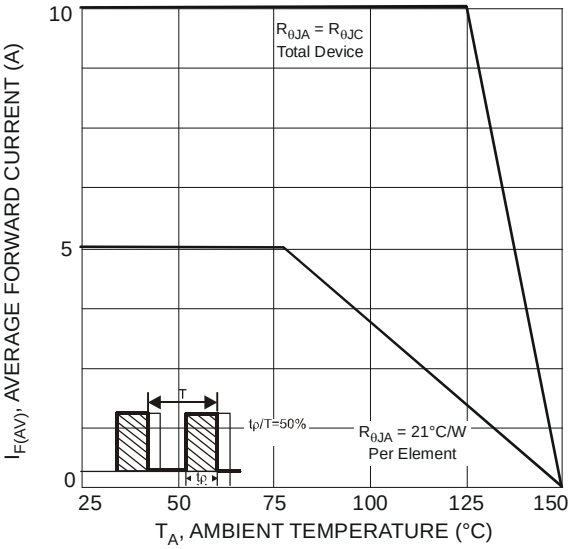
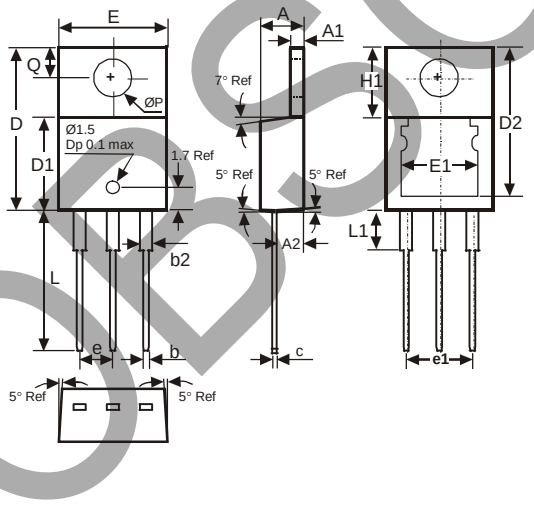


Fig. 3 Forward Current Derating Curve

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
c	0.356	0.61	–
D	14.22	16.51	15.00
D1	8.60	8.80	8.70
D2	13.68	14.08	–
e	2.49	2.59	2.54
e1	4.98	5.18	5.08
E	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	–
P	3.54	4.08	–
Q	2.54	3.42	–
All Dimensions in mm			

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