



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

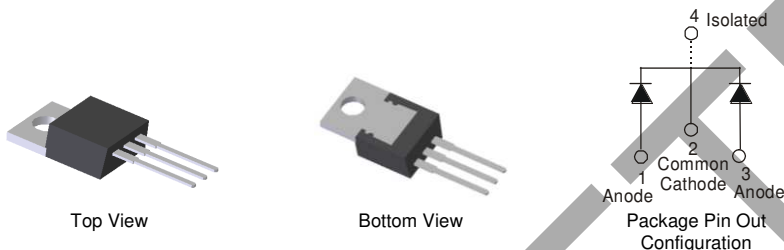


Features

- Low Forward Voltage Drop
- Soft, Fast Switching Capability
- Schottky 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 ②
- Weight: 1.335 grams (approximate)

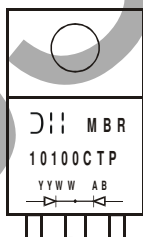


Ordering Information (Notes 1 & 2)

Part Number	Case	Packaging
MBR10100CTP	ITO-220S	50 pieces/tube
MBR10100CTP-G	ITO-220S	50 pieces/tube

- Notes:
1. For packaging details, go to our website at <http://www.diodes.com>.
 2. For Green Molding compound version part number, add "-G" suffix to part number. Example: MBR10100CTP-G.

Marking Information



MBR10100CTP = 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) @ $T_A = 25^\circ\text{C}$ 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	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_{RM}		
Average Rectified Output Current	(Per Leg)	5	A
	(Total)	10	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	100	A
Isolation Voltage From Terminal Heatsink $t = 1$ min.	V_{AC}	2000	V

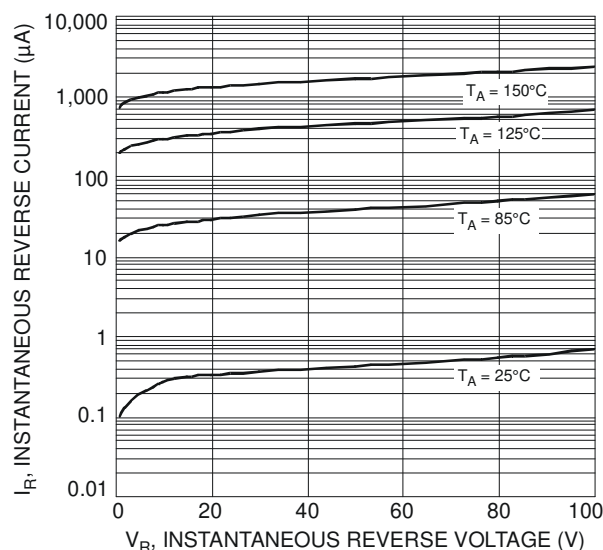
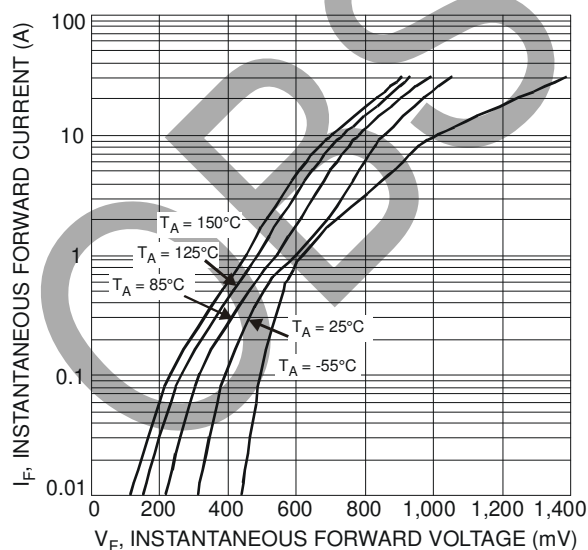
Thermal Characteristics (Per Leg)

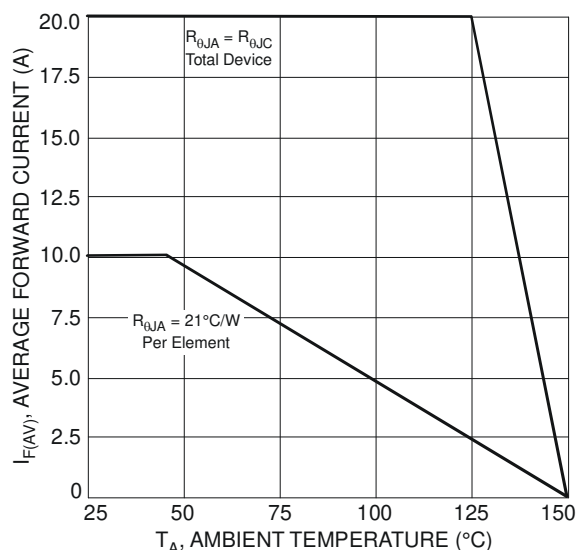
Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Case	$R_{\theta JC}$	3	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175	$^\circ\text{C}$

Electrical Characteristics (Per Leg) @ $T_A = 25^\circ\text{C}$ unless otherwise specified

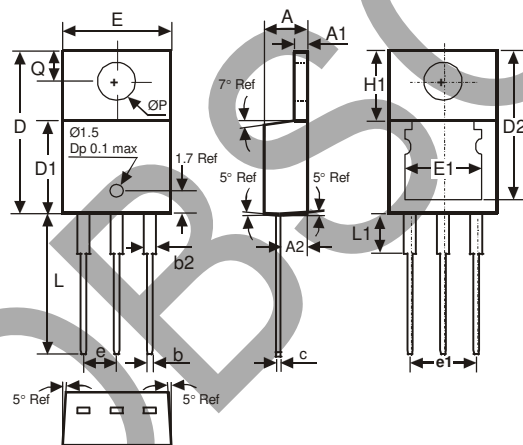
Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	V_F	-	0.79	0.85	V	$I_F = 5\text{A}, T_J = 25^\circ\text{C}$
		-	0.65	0.75		$I_F = 5\text{A}, T_J = 125^\circ\text{C}$
Leakage Current (Note 3)	I_R	-	-	0.1	mA	$V_R = 100\text{V}, T_J = 25^\circ\text{C}$
		-	-	15		$V_R = 100\text{V}, T_J = 125^\circ\text{C}$

Note: 3. 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
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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