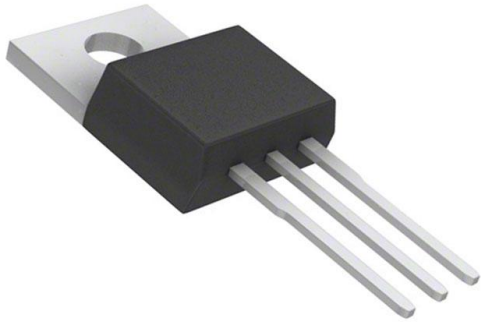


MBR20150CTP Datasheet

www.digi-electronics.com



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	MBR20150CTP-DG
Manufacturer	Diodes Incorporated
Manufacturer Product Number	MBR20150CTP
Description	DIODE ARR SCHOT 150V 10A ITO220S
Detailed Description	Diode Array 1 Pair Common Cathode 150 V 10A Through Hole TO-220-3 Isolated Tab

This model MBR20150CTP is available at DiGi Electronics.

DiGi Electronics offers a global database of semiconductor and electronic component datasheets.

We welcome your inquiries regarding pricing, lead time, or other product-related questions.

 [Request a Quote](#)

 [Datasheet Search](#)



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

MBR20150CTP

Series:

-

Diode Configuration:

1 Pair Common Cathode

Voltage - DC Reverse (Vr) (Max):

150 V

Voltage - Forward (Vf) (Max) @ If:

900 mV @ 10 A

Current - Reverse Leakage @ Vr:

100 μ A @ 150 V

Mounting Type:

Through Hole

Supplier Device Package:

ITO-220S

Manufacturer:

Diodes Incorporated

Product Status:

Obsolete

Technology:

Schottky

Current - Average Rectified (Io) (per Diode):

10A

Speed:

Fast Recovery \leq 500ns, > 200mA (Io)

Operating Temperature - Junction:

-65°C ~ 175°C

Package / Case:

TO-220-3 Isolated Tab

Base Product Number:

MBR20150

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Affected

HTSUS:

8541.10.0080

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



**PART OBSOLETE – NO EXACT
ALTERNATE PART. USE MBR20150 of
other available packages.**

MBR20150CTP

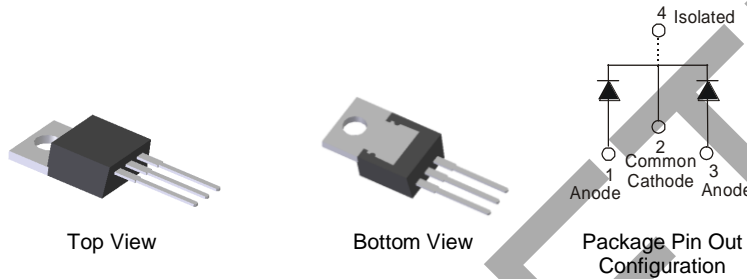
20A SCHOTTKY BARRIER RECTIFIER

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 (E3)
- Weight: 1.335 grams (approximate)

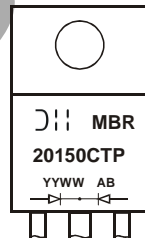


Ordering Information (Note 1)

Part Number	Case	Packaging
MBR20150CTP	ITO-220S	50 pieces/tube

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

Marking Information



MBR20150CTP = 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)

OBSOLETE – PART DISCONTINUED



OBSOLETE - PART DISCONTINUED

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}	150	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_{RM}		
Average Rectified Output Current	(Per Leg)	10	A
	(Total)	20	
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	$^\circ\text{C/W}$
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	-	-	0.9	V	$I_F = 10\text{A}, T_J = 25^\circ\text{C}$
Leakage Current (Note 2)	I_R	-	-	0.1	mA	$V_R = 150\text{V}, T_J = 25^\circ\text{C}$
		-	-	20		$V_R = 150\text{V}, T_J = 125^\circ\text{C}$

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

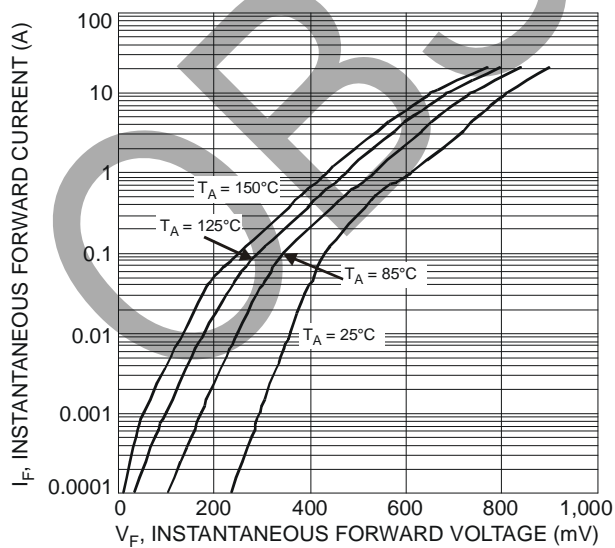


Fig. 1 Typical Forward Characteristics

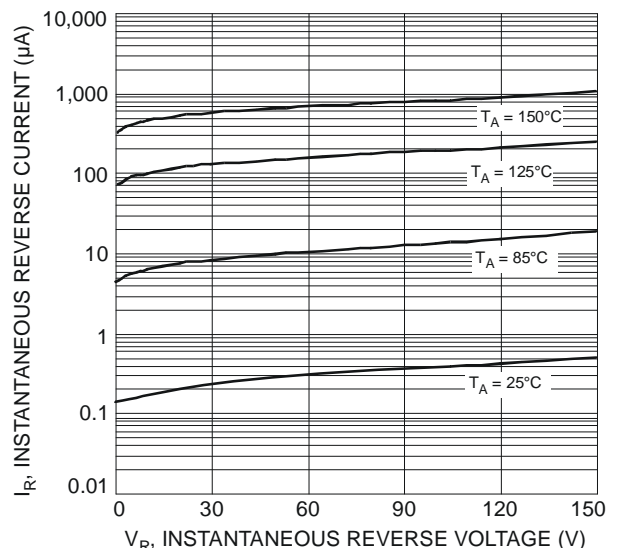


Fig. 2 Typical Reverse Characteristics



MBR20150CTP

OBSOLETE - PART DISCONTINUED

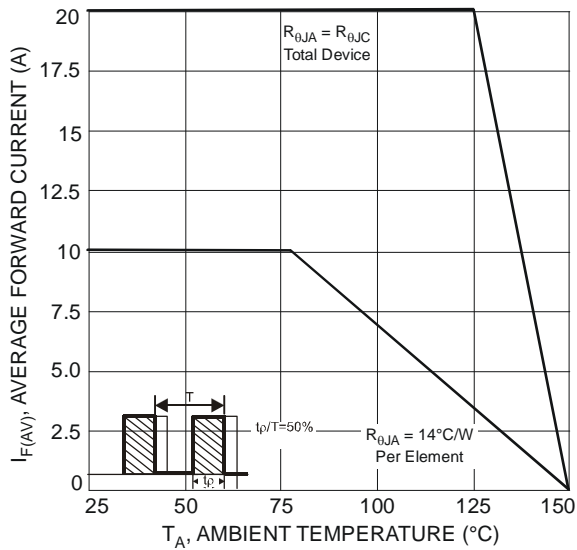
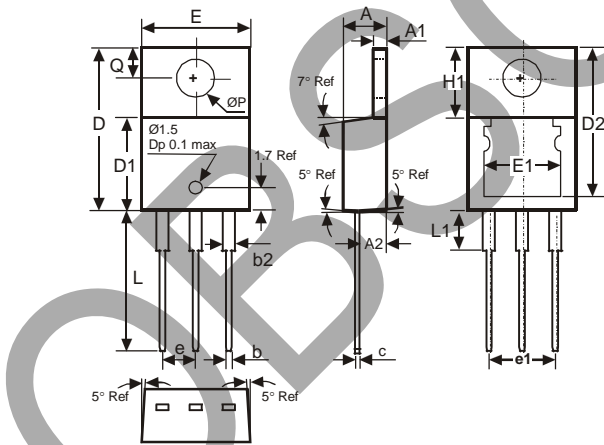


Fig. 3 Forward Current Derating Curve

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			



IMPORTANT NOTICE

DIODES INCORPORATED MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH REGARDS TO THIS DOCUMENT, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION).

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to this document and any product described herein. Diodes Incorporated does not assume any liability arising out of the application or use of this document or any product described herein; neither does Diodes Incorporated convey any license under its patent or trademark rights, nor the rights of others. Any Customer or user of this document or products described herein in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on Diodes Incorporated website, harmless against all damages.

Diodes Incorporated does not warrant or accept any liability whatsoever in respect of any products purchased through unauthorized sales channel. Should Customers purchase or use Diodes Incorporated products for any unintended or unauthorized application, Customers shall indemnify and hold Diodes Incorporated and its representatives harmless against all claims, damages, expenses, and attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized application.

Products described herein may be covered by one or more United States, international or foreign patents pending. Product names and markings noted herein may also be covered by one or more United States, international or foreign trademarks.

This document is written in English but may be translated into multiple languages for reference. Only the English version of this document is the final and determinative format released by Diodes Incorporated.

LIFE SUPPORT

Diodes Incorporated products are specifically not authorized for use as critical components in life support devices or systems without the express written approval of the Chief Executive Officer of Diodes Incorporated. As used herein:

A. Life support devices or systems are devices or systems which:

1. are intended to implant into the body, or
2. support or sustain life and whose failure to perform when properly used in accordance with instructions for use provided in the labeling can be reasonably expected to result in significant injury to the user.

B. A critical component is any component in a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or to affect its safety or effectiveness.

Customers represent that they have all necessary expertise in the safety and regulatory ramifications of their life support devices or systems, and acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of Diodes Incorporated products in such safety-critical, life support devices or systems, notwithstanding any devices- or systems-related information or support that may be provided by Diodes Incorporated. Further, Customers must fully indemnify Diodes Incorporated and its representatives against any damages arising out of the use of Diodes Incorporated products in such safety-critical, life support devices or systems.

Copyright © 2015, Diodes Incorporated

www.diodes.com

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we strictly control the quality of products and services. Welcome your RFQ to

Email: Info@DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.