

MBR2060CTP

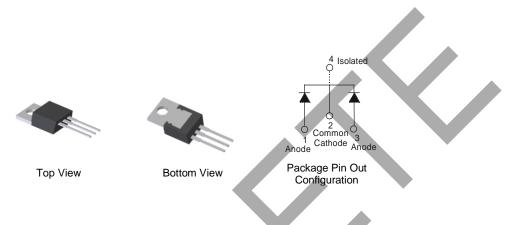
#### 20A SCHOTTKY BARRIER RECTIFIER

#### **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 <sup>(3)</sup>
- Weight: 1.335 grams (approximate)

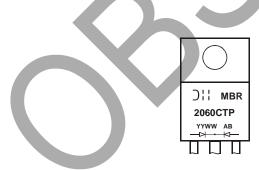


### **Ordering Information** (Note 1)

Part Number	Case	Packaging
MBR2060CTP	ITO-220S	50 pieces/tube

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

## **Marking Information**



MBR2060CTP = Product Type Marking Code AB = Foundry and Assembly Code YYWW = Date Code Marking YY = Last two digits of year (ex: 09 = 2009) 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>	60	V
Average Rectified Output Current (Per Le (Total)	g) I <sub>O</sub>	10 20	А
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	170	A
Isolation Voltage From terminal to heatsink t = 1min.	V <sub>AC</sub>	2000	V

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

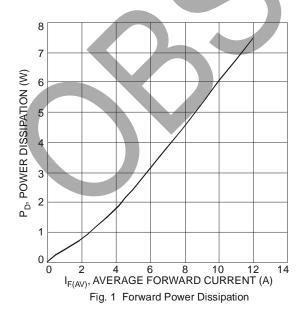
Characteristic	Symbol	Value	Unit
Maximum Thermal Resistance, Junction to Case	$R_{ heta}$ JC	3	°C/W
Operating and Storage Temperature Range	$T_{J}$ , $T_{STG}$	-65 to +175	°C

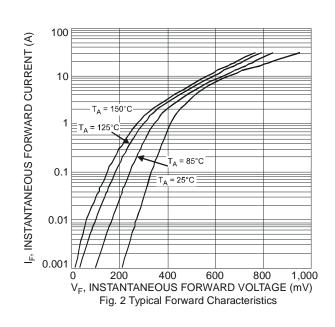
# Electrical Characteristics (Per Leg) @T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Forward Voltage Drop	VF	1	0.60	0.80 0.70	I V	I <sub>F</sub> = 10A, T <sub>J</sub> = 25°C I <sub>F</sub> = 10A, T <sub>J</sub> = 125°C
Leakage Current (Note 2)	I <sub>R</sub>	-	6 4.2	100 20	μA mA	V <sub>R</sub> = 60V, T <sub>J</sub> = 25°C V <sub>R</sub> = 60V, T <sub>J</sub> = 125°C

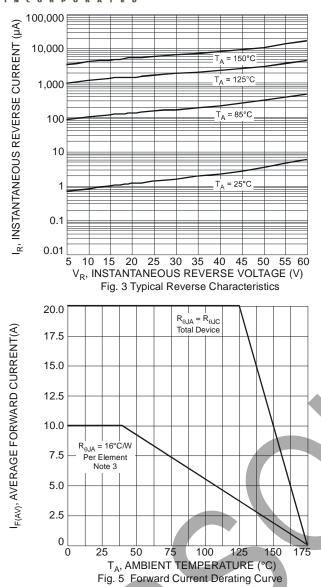
Notes:

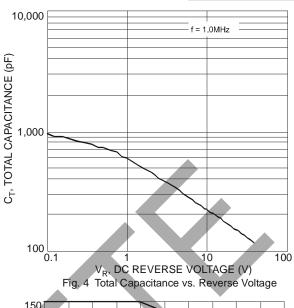
- 2. Short duration pulse test used to minimize self-heating effect.
- 3. Device mounted on Black Aluminum Heatsink, 37mm  $^{\star}$  50mm  $^{\star}$  15mm.

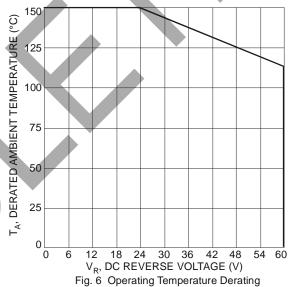




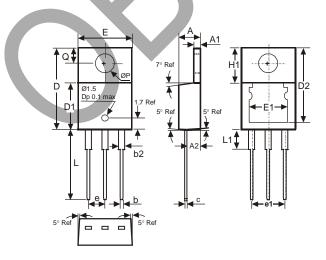








# **Package Outline Dimensions**



ITO220S						
DIM.	MIN.	MAX.	TYP.			
Α	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			
Ε	10.01	10.21	10.11			
E1	6.86	8.89	-			
H1	5.85	6.85	-			
L	13.30	13.90	13.60			
L1	_	6.35	_			
Р	3.54	4.08	_			
Q	2.54	3.42	_			
All Dimensions in mm						



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