



MBR2100

Preliminary

DIODE

SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

The UTC **MBR2100** is a schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop, high current capability and high efficiency, etc.

The UTC **MBR2100** is suitable for free wheeling, high frequency inverters, polarity protection application.

FEATURES

- * Low forward voltage drop
- * High efficiency
- * High surge capability

SYMBOL



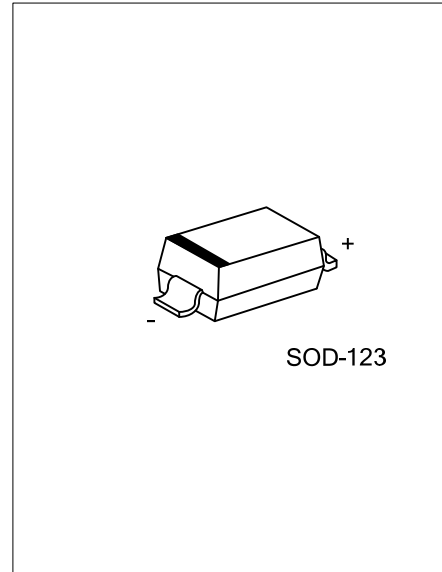
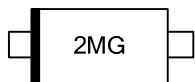
ORDERING INFORMATION

Ordering Number	Package	Pin Assignment		Packing
		1	2	
MBR2100G-CA2-R	SOD-123	A	K	Tape Reel

Note: Pin assignment: A: Anode K: Cathode

<p>MBR2100G-CA2-R</p>	<p>(1)Packing Type (2)Package Type (3)Green Package</p>	<p>(1) R: Tape Reel (2) CA2: SOD-123 (3) G: Halogen Free and Lead Free</p>
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MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V_{RM}	100	V
Working Peak Reverse Voltage	V_{RWM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Average Rectified Output Current	I_O	2.0	A
Non-Repetitive Peak Forward Surge Current: 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	40	A
Operating Junction Temperature	T_J	-65~+150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-65~+150	$^{\circ}\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	625	$^{\circ}\text{C/W}$

■ ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage Drop (Note 3)	V_F	$I_F=2.0\text{A}$ $T_J=25^{\circ}\text{C}$			0.79	V
		$I_F=2.0\text{A}$, $T_J=125^{\circ}\text{C}$			0.69	V
Peak Reverse Current at Rated DC Blocking Voltage	I_R	$T_J=25^{\circ}\text{C}$, $V_R=100\text{V}$			100	μA
		$T_J=125^{\circ}\text{C}$, $V_R=100\text{V}$			10	mA

Notes: 1. Measured at ambient temperature at a distance of 9.5mm from the case.

2. Minimum Pad Area.

3. Pulse test: 300 μs pulse width, duty cycle 2%.

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