



MBR2100

Preliminary

DIODE

2.0A SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

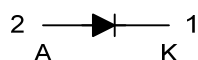
The UTC **MBR2100** is a schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop, high current capability and high efficiency, etc.

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
Lead Free	Halogen Free		1	2	
MBR2100L-CA2-R	MBR2100G-CA2-R	SOD-123	K	A	Tape Reel
MBR2100L-SMA-R	MBR2100G-SMA-R	SMA	K	A	Tape Reel
MBR2100L-SMB-R	MBR2100G-SMB-R	SMB	K	A	Tape Reel
MBR2100L-SMC-R	MBR2100G-SMC-R	SMC	K	A	Tape Reel

Note: Pin assignment: K: Cathode A: Anode

<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, SMA: SMA, SMB: SMB SMC: SMC (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING

SOD-123	SMA / SMB / SMC
<p>2M</p> <p>L: Lead Free G: Halogen Free</p>	<p>UTC</p> <p>2M</p> <p>Date Code</p> <p>L: Lead Free G: Halogen Free</p> <p>Cathode Band for uni-directional Only</p>

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°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	°C
Storage Temperature	T _{STG}	-65 ~ +150	°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 DATA (Note)

PARAMETER	SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	SOD-123	25	°C/W
	SMA	32	°C/W
	SMB	20	°C/W
	SMC	11	°C/W

Note: FR-4 PCB, 2 oz Copper. Minimum recommended pad layout.

■ ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage Drop (Note 3)	V _F	I _F =2.0A T _J =25°C			0.79	V
		I _F =2.0A, T _J =125°C			0.69	V
Peak Reverse Current at Rated DC Blocking Voltage	I _R	T _J =25°C, V _R =100V			100	μA
		T _J =125°C, V _R =100V			10	mA

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

2. Minimum Pad Area.

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

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