



MBR3100

DIODE

3.0A SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

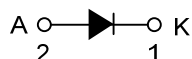
The UTC **MBR3100** is a 3.0A schottky barrier rectifier, it uses UTC's advanced technology to provide the customers with high surge capability, high efficiency, high current capability, low power loss and low forward voltage drop, etc.

The UTC **MBR3100** is suitable for free wheeling and polarity protection, etc.

FEATURES

- * Low forward voltage drop, High Current Capability
- * Low power loss, High efficiency
- * High Surge Capability
- * For Use in Low Voltage, High Frequency Inverters and Polarity Protection Applications.

SYMBOL



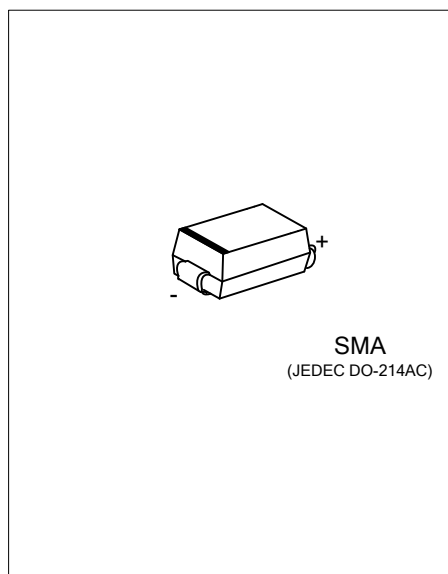
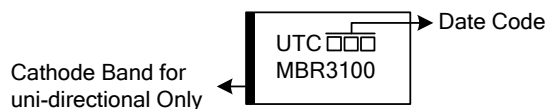
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
MBR3100L-SMA-R	MBR3100G-SMA-R	SMA	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

MBR3100G-SMA-R	(1) Packing Type (2) Package Type (3) Green Package	(1) R: Tape Reel (2) SMA: SMA (3) G: Halogen Free and Lead Free, L: Lead Free
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MARKING



SMA
(JEDEC DO-214AC)

ABSOLUTE MAXIMUM RATING (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, for capacitive load current derate by 20%.

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V _{RM}	100	V
Working Peak Reverse Voltage	V _{RWM}	100	V
Peak Repetitive Reverse Voltage	V _{RRM}	100	V
Average Rectified Output Current	I _O	3.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	80	A
Junction Temperature	T _J	-55 ~ +150	°C
Storage Temperature	T _{STG}	-55 ~ +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 CHARACTERISTICS (PER LEG)

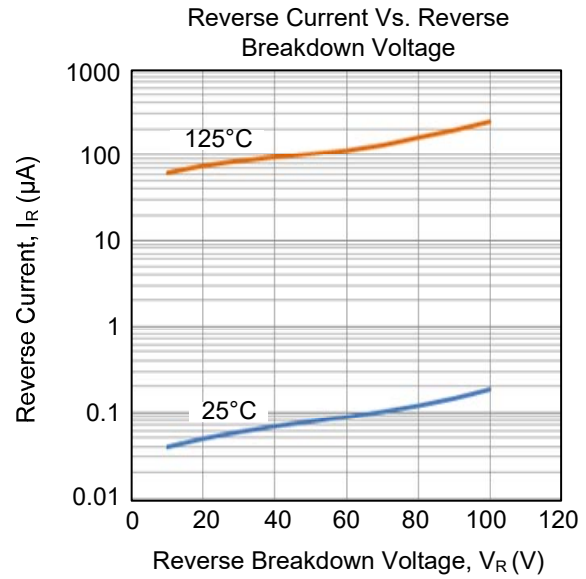
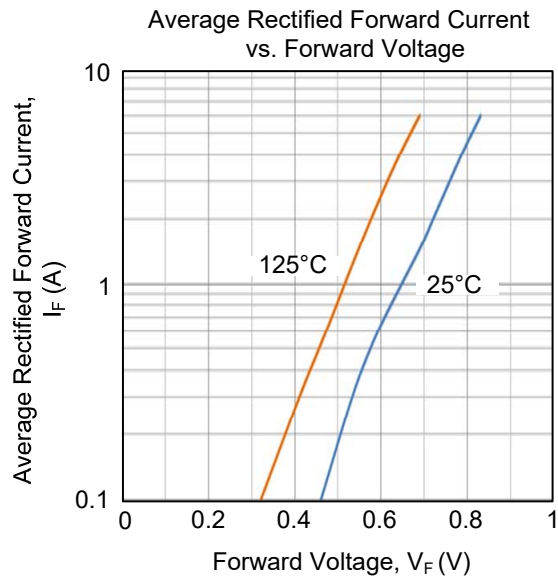
PARAMETER	SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	θ _{JL}	20	°C/W

ELECTRICAL CHARACTERISTICS (PER LEG) (T_A=25°C unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	V _{(BR)R}	I _R =0.50mA	100			V
Instantaneous Forward Voltage	V _{FM}	I _F =3.0A, T _C =25°C			0.85	V
		I _F =3.0A, T _C =125°C			0.70	V
Leakage Current	I _{RM}	V _R =100V, T _C =25°C			500	μA
		V _R =100V, T _C =125°C			2.0	mA

Note: Pulse Test: Pulse width ≤ 300μs, Duty cycle ≤ 2%.

■ TYPICAL CHARACTERISTICS



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