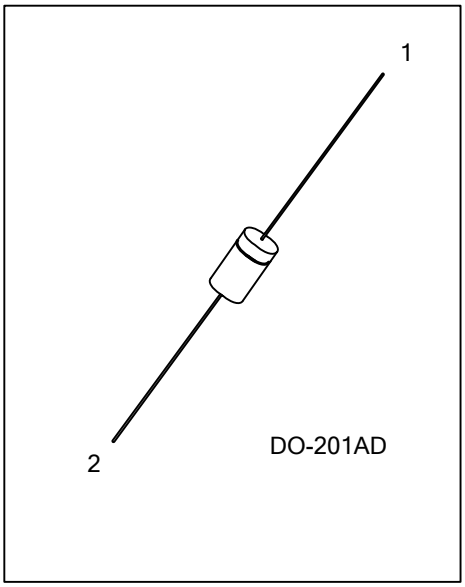
MBR20100 **Preliminary** ***DIODE***

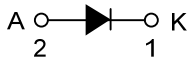
SCHOTTKY BARRIER RECTIFIER



■ FEATURES

* 20 Amps Total (10 Amps Per Diode Leg)
* Guard Ring for Transient Protection
* Low Forward Voltage Drop
* High Surge Capability
* Low Power Loss/High Efficiency

■ SYMBOL



■ ORDERING INFORMATION

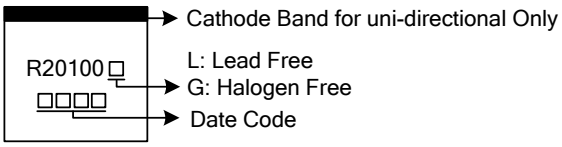
Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
MBR20100L-Z21D-B	MBR20100G-Z21D-B	DO-201AD	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

MBR20100L-Z21D-B
(1)Packing Type
(2)Package Type
(3)Green Package

(1) B: Tape Box
(2) Z21D: DO-201AD
(3) L: Lead Free, G: Halogen Free and Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum DC Blocking Voltage	V_R	100	V
Working Peak Reverse Voltage	V_{RWM}	100	V
Maximum PMS Reverse Voltage	$V_{R(RMS)}$	90	V
Average Forward Rectified Output Current	I_O	20	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave	I_{FSM}	150	A
Junction Capacitance (Note 4)	C_J	1000	pF
Operating Temperature	T_J	-55 ~ +150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

■ THERMAL RESISTANCES CHARACTERISTICS

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	20	°C/W

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage Drop (Note 3)	V_F	I_F=20A, T_C=25°C			0.84	V
		I_F=20A, T_C=125°C			0.74	V
Instantaneous Reverse Current (Note 3)	I_R	Rated DC Voltage, T_C=25°C			0.1	mA
		Rated DC Voltage, T_C=125°C			30	mA

Notes: 1. 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.
2. 2.0μs Pulse Width, f = 1.0KHz.
3. Pulse Test: Pulse Width = 300μs, Duty Cycle ≤ 2.0%.
4. Applied V_R = 4.0V and f = 1.0MHz.