

MBR1050 AND MBR1060

SCHOTTKY RECTIFIER

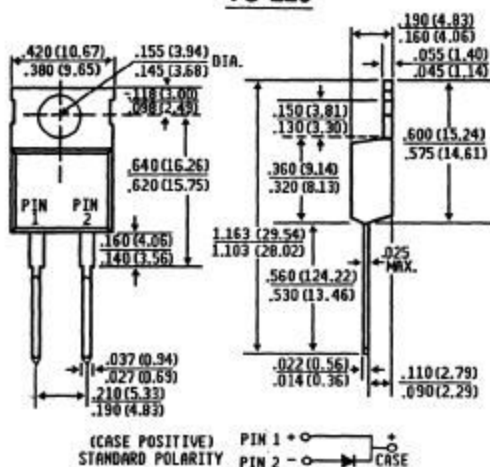
VOLTAGE RANGE - 50 and 60 Volts CURRENT -10.0 Amperes

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- ◆ Metal to silicon rectifier, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ High current capability, low VF
- ◆ High surge capacity
- ◆ Epitaxial construction
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆ Guardring for transient protection
- ◆ High temperature soldering guaranteed: 250°C/10 seconds/.25" (6.35mm) from case



TO-220



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: JEDEC TO-220 Molded Plastic

Terminals: Leads Solderable per MIL-STD-202, Method 208

Polarity: As marked **Mounting Position:** Any

Weight: .08 ounces, 2.24 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load.

For capacitive load, derate current by 20%.

		SYMBOLS	MBR1050	MBR1060	UNITS
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	50	60	Volts
Maximum Working Peak Reverse Voltage		V _{RWM}	50	60	Volts
Maximum DC Blocking Voltage		V _{DC}	50	60	Volts
Maximum Average Forward Rectified Current T _C =133°C		I _(AV)	10.0		Amps
Peak Repetitive Forward Current, (Square Wave 20 KHz) at T _C =133°C		I _{FSM}	20.0		Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	150.0		Amps
Peak Repetitive Reverse Surge Current (NOTE 2)		I _{RRM}	0.5		Amps
Voltage Rate of Change at (rated V _R)		dv/dt	1000		V/μs
Maximum Instantaneous Forward Voltage (NOTE 1)		V _F	I _F =10A, T _C =25°C		Volts
			I _F =10A, T _C =125°C		
			I _F =20A, T _C =125°C		
			I _F =20A, T _C =25°C		
Maximum Instantaneous Reverse Current at rated DC Blocking Voltage (NOTE 1)		I _R	T _C =125°C		mA
			T _C =25°C		
Maximum Thermal Resistance, Junction to Case		R _{θJC}	2.0		°C/W
Operating Junction Temperature Range		T _J	-65 to +150		°C
Storage Temperature Range		T _{STG}	-65 to +175		°C

NOTES:

1. Pulse Test: Pulse Width 300 μs, Duty Cycle 2%.

2. 2.0 μs Pulse Width, f=1.0 KHz.