

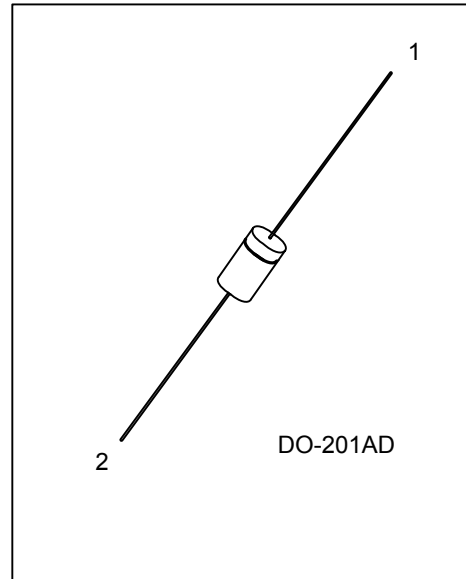


MBR540

Preliminary

DIODE

SCHOTTKY BARRIER RECTIFIER



DESCRIPTION

The UTC MBR540 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 MBR540 is suitable for use in free wheeling, high frequency inverters, low voltage and polarity protection applications.

FEATURES

- * High efficiency
* Low power loss
* High surge capability
* High current capability

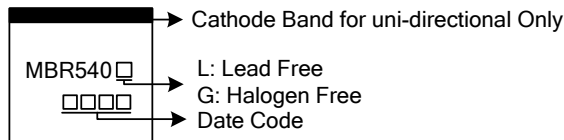
ORDERING INFORMATION

Table with columns: Ordering Number (Lead Free, Halogen Free), Package, Pin Assignment (1, 2), and Packing. Example: MBR540L-Z21D-R, DO-201AD, K, A, Tape Box.

Note: Pin Assignment: A: Anode K: Cathode

Table explaining part number breakdown: MBR540L-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

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_{DC}	40	V
Recurrent Peak Reverse Voltage	V_{RRM}	40	V
Average Rectified Output Current	I_O	5	A
Non-Repetitive Peak Forward Surge Current: 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	120	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 RESISTANCES CHARACTERISTICS

PARAMETER	SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	θ_{JA}	25	°C/W

■ ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage Drop	V_F	$I_F=5.0A, T_J=25^\circ C$			0.58	V
		$I_F=5.0A, T_J=125^\circ C$			0.50	V
Peak Reverse Current at Rated DC Blocking Voltage	I_R	$V_R=40, T_J=25^\circ C$			300	μA
		$V_R=40, T_J=125^\circ C$			50	mA

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