



MBR0560

Preliminary

DIODE

0.5 AMP SCHOTTKY RECTIFIER

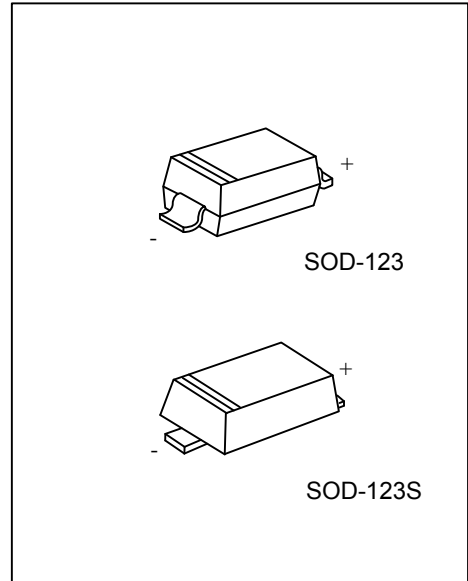
DESCRIPTION

The UTC **MBR0560** is a Schottky Rectifier with high current capacity, ultra low thermal resistance and low forward voltage.

The UTC **MBR0560** is suitable for surface mount applications.

FEATURES

- * Ultra Low Thermal Resistance
- * High Current Capability
- * Low Forward Voltage



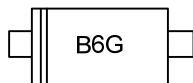
ORDERING INFORMATION

Ordering Number	Package	Pin Assignment		Packing
		1	2	
MBR0560G-CA2-R	SOD-123	K	A	Tape Reel
MBR0560G-CA2S-R	SOD-123S	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>MBR0560G-CA2-R</p> <p>(1)Packing Type (2)Package Type (3)Green Package</p>	<p>(1) R: Tape Reel (2) CA2: SOD-123, CA2S: SOD-123S (3) G: Halogen Free and Lead Free</p>
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MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	60	V
Working Peak Reverse Voltage	V _{RWM}	60	V
Maximum DC Blocking Voltage	V _R	60	V
Average Rectified Output Current	I _O	0.5	A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	5.5	A
Operating Temperature	T _{OPR}	-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	SOT-123	20	°C/W
	SOT-123S	30 (Note)	°C/W

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

■ 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	60			V
Forward Voltage Drop	V _{FM}	I _F =0.5A, T _C =25°C			0.7	V
Leakage Current	I _{RM}	Rated DC Voltage, T _C =25°C			200	µA
Junction Capacitance (Note 2)	C _J			30		pF

Notes: 1. Pulse Test: Pulse width ≤ 300µs, Duty cycle ≤ 2%.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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