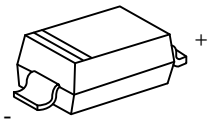
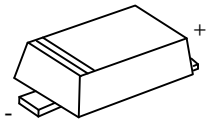
0.5 AMP SCHOTTKY RECTIFIER



SOD-123



SOD-123S

■ 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

MBR0560G-CA2-R

(1)Packing Type — (1) R: Tape Reel

(2)Package Type — (2) CA2: SOD-123, CA2S: SOD-123S

(3)Green Package — (3) G: Halogen Free and Lead Free

■ 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	T_C=125°C	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	θ_{JL}	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.