

MBR0560 Preliminary DIODE

0.5 AMP SCHOTTKY RECTIFIER

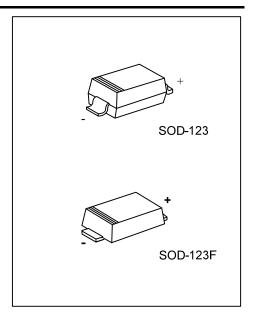
■ DESCRIPTION

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

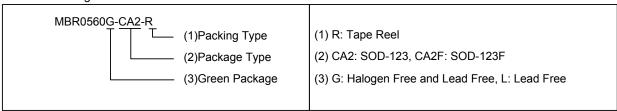
- * Ultra Low Thermal Resistance
- * High Current Capability
- * Low Forward Voltage



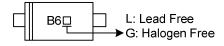
ORDERING INFORMATION

Ordering Number		Dealtage	Pin Assignment		Deaking	
Lead Free	Halogen Free	Package	1	2	Packing	
MBR0560L-CA2-R	MBR0560G-CA2-R	SOD-123	K	Α	Tape Reel	
MBR0560L-CA2F-R	MBR0560G-CA2F-R	SOD-123F	K	Α	Tape Reel	

Note: Pin Assignment: A: Anode K: Cathode



MARKING



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■ 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	Io	0.5	Α
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	5.5	А
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
T i and The second Descietance	SOT-123	0	20	°C/W
Typical Thermal Resistance	SOT-123F	θ _{JL}	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		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)	CJ			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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