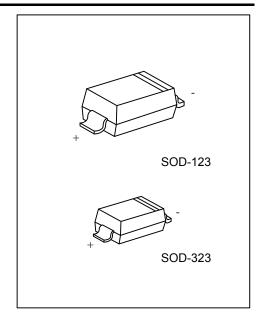
MBR0530

# **SCHOTTKY RECTIFIER**

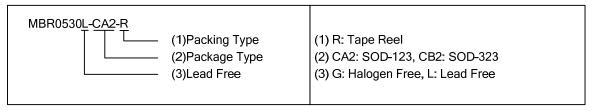
## **■ FEATURES**

- \* For surface mounted applications
- \* Low forward voltage drop (V<sub>F</sub>=0.37V Typ. at 0.1A)
- \* Guard ring for transient and ESD protection

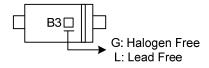


#### **■ ORDERING INFORMATION**

Ordering Number		Dookogo	Dooking	
Lead Free	Halogen Free	Package	Packing	
MBR0530L-CA2-R	MBR0530G-CA2-R	SOD-123	Tape Reel	
MBR0530L-CB2-R	MBR0530G-CB2-R	SOD-323	Tape Reel	



## ■ MARKING



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## ■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	30	V
Maximum DC Blocking Voltage	$V_R$	30	V
Working Peak Reverse Voltage	$V_{RWM}$	30	V
Maximum RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Maximum Voltage Rate of Change (Rated V <sub>R</sub> )	dv/dt	1000	V/µs
Average Rectified Forward Current	l <sub>OUT</sub>	500	mA
Non-Repetitive Peak Forward Surge Current	I <sub>FSM</sub>	5.5	Α
Power Dissipation	$P_D$	410	mW
Storage Temperature	T <sub>STG</sub>	-65 ~ +150	$^{\circ}\!\mathbb{C}$

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 DATA**

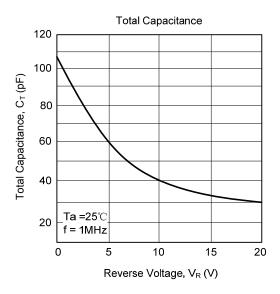
PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	$\theta_{JA}$	244	°C/W

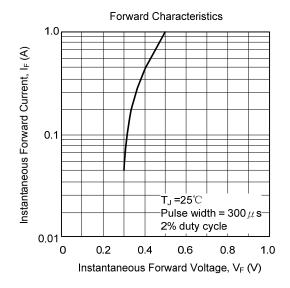
## ■ **ELECTRICAL CHARACTERISTICS** (T<sub>A</sub>=25°C, unless otherwise specified)

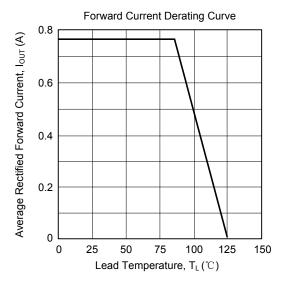
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT	
Reverse Breakdown Voltage	$BV_R$	I <sub>R</sub> =130μA	30			V	
Forward Voltage Drop	$V_{F1}$	I <sub>F</sub> =0.1A			0.375	V	
	$V_{F2}$	I <sub>F</sub> =0.5A			0.430		
Reverse Leakage Current	I <sub>R1</sub>	V <sub>R</sub> =15V			20	μA	
	I <sub>R2</sub>	V <sub>R</sub> =30V			130		
Total Capacitance	Ст	V <sub>R</sub> =1V, f=1MHz			170	pF	
Typical Reverse Recovery Time	t <sub>RR</sub>	$I_F=I_R=10$ mA, $R_L=100\Omega$ , recover to 0.1 x $I_R$			4	ns	

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## TYPICAL CHARACTERISTICS







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