



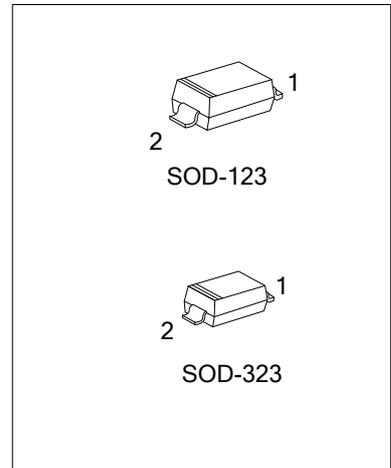
## MBR0530

DIODE

### SCHOTTKY RECTIFIER

#### FEATURES

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



#### ORDERING INFORMATION

Order Number	Package	Pin Assignment		Packing
		1	2	
MBR0530G-CA2-R	SOD-123	A	K	Tape Reel
MBR0530G-CB2-R	SOD-323	A	K	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>MBR0530G-CA2-R</p>	<p>(1) R: Tape Reel (2) CA2: SOD-123, CB2: SOD-323 (3) G: Halogen Free and Lead Free</p>
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#### MARKING



■ ABSOLUTE MAXIMUM RATINGS ( $T_A=25^{\circ}\text{C}$ , unless otherwise specified)

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 $V_R$ )	$dv/dt$	1000	V/ $\mu\text{s}$
Average Rectified Forward Current	$I_{OUT}$	500	mA
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	5.5	A
Power Dissipation	$P_D$	410	mW
Storage Temperature	$T_{STG}$	-65 ~ +150	$^{\circ}\text{C}$

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.

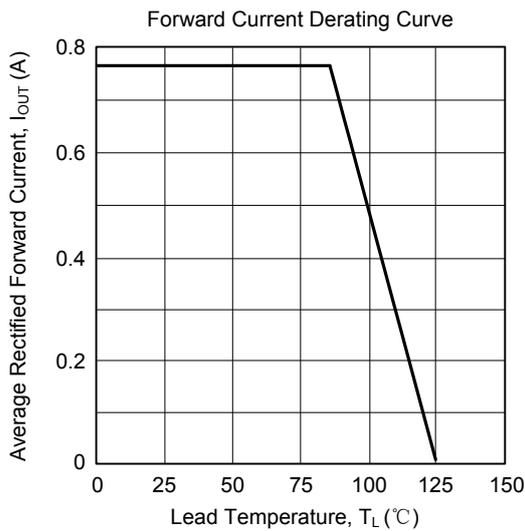
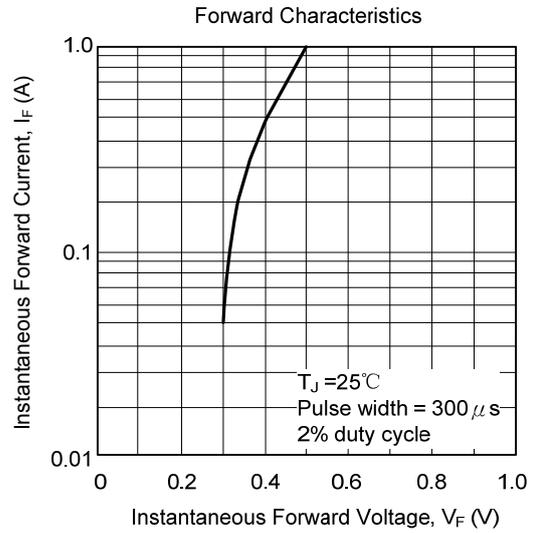
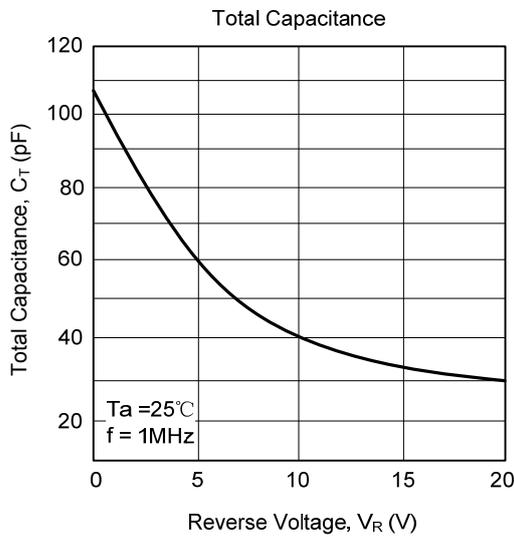
■ THERMAL DATA

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

■ ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	$BV_R$	$I_R=130\mu\text{A}$	30			V
Forward Voltage Drop	$V_{F1}$	$I_F=0.1\text{A}$			0.375	V
	$V_{F2}$	$I_F=0.5\text{A}$			0.430	
Reverse Leakage Current	$I_{R1}$	$V_R=15\text{V}$			20	$\mu\text{A}$
	$I_{R2}$	$V_R=30\text{V}$			130	
Total Capacitance	$C_T$	$V_R=1\text{V}$ , $f=1\text{MHz}$			170	pF
Typical Reverse Recovery Time	$t_{RR}$	$I_F=I_R=10\text{mA}$ , $R_L=100\Omega$ recover to $0.1 \times I_R$			4	ns

■ TYPICAL CHARACTERISTICS



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