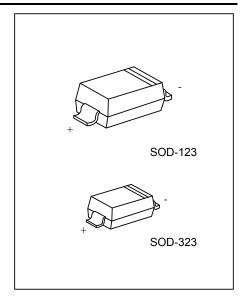
MBR0530 DIODE

SCHOTTKY RECTIFIER

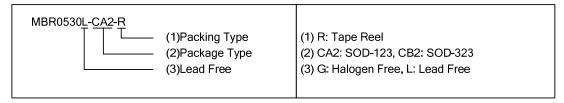
■ FEATURES

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



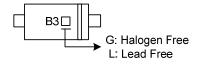
ORDERING INFORMATION

Ordering Number		Packago	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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MBR0530 DIODE

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	30	٧
Maximum DC Blocking Voltage	V_R	30	٧
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/µs
Average Rectified Forward Current	l _{out}	500	mA
Non-Repetitive Peak Forward Surge Current	I _{FSM}	5.5	Α
Power Dissipation	P _D	410	mW
Storage Temperature	T _{STG}	-65 ~ + 150	$^{\circ}$

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

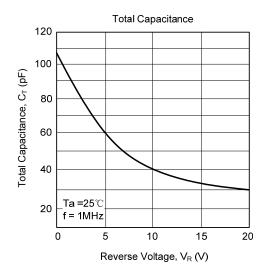
PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	244	°C/W

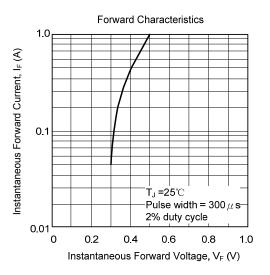
■ **ELECTRICAL CHARACTERISTICS** (T_A=25°C, unless otherwise specified)

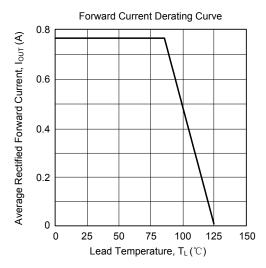
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT	
Reverse Breakdown Voltage	BV_R	I _R =130μA	30			V	
Forward Voltage Drop	V_{F1}	I _F =0.1A			0.375	V	
	V_{F2}	I _F =0.5A			0.430		
Reverse Leakage Current	I _{R1}	V _R =15V			20	μA	
	I _{R2}	V _R =30V			130		
Total Capacitance	C_T	V _R =1V, f=1MHz			170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

MBR0530 DIODE

TYPICAL CHARACTERISTICS







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