



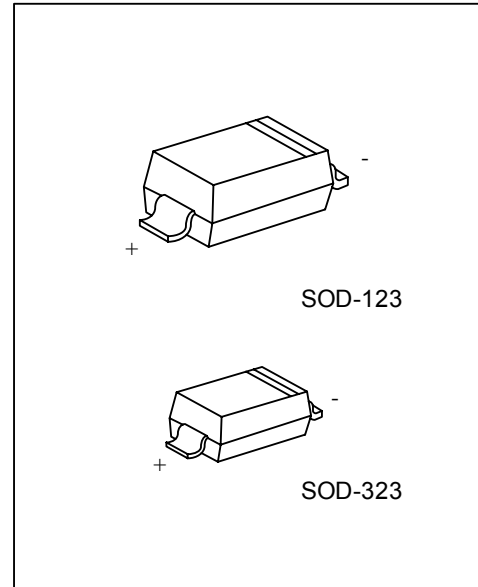
MBR0540

DIODE

SCHOTTKY RECTIFIER

■ FEATURES

- * For surface mounted applications
- * Low forward voltage drop ($V_f=0.50V$ Typ. at 0.5A)
- * Guard ring for transient and ESD protection



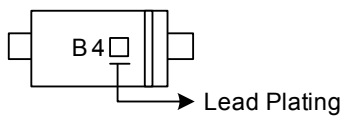
*Pb-free plating product number: MBR0540L

■ ORDERING INFORMATION

Order Number		Package	Packing
Normal	Lead Free Plating		
MBR0540-CA2-R	MBR0540L-CA2-R	SOD-123	Tape Reel
MBR0540-CB2-R	MBR0540L-CB2-R	SOD-323	Tape Reel

<p>MBR0540L-CA2-R</p>	<p>(1) R: Tape Reel (2) CA2: SOD-123, CB2: SOD-323 (3) L: Lead Free Plating Blank: Pb/Sn</p>
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■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (Single Diode @T_A=25)

PARAMETER	SYMBOL	RATINGS	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	40	V
Maximum DC Blocking Voltage	V _R	40	V
Working Peak Reverse Voltage	V _{RWM}	40	V
Maximum RMS Reverse Voltage	V _{R(RMS)}	28	V
Maximum Voltage Rate of Change (Rated V _R)	dv/dt	1000	V/μs
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	

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.

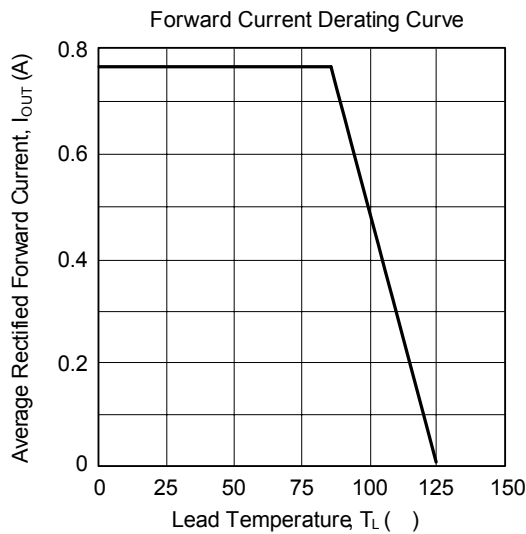
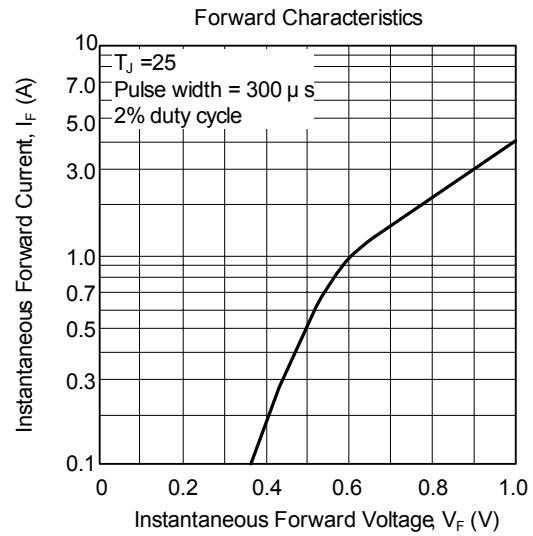
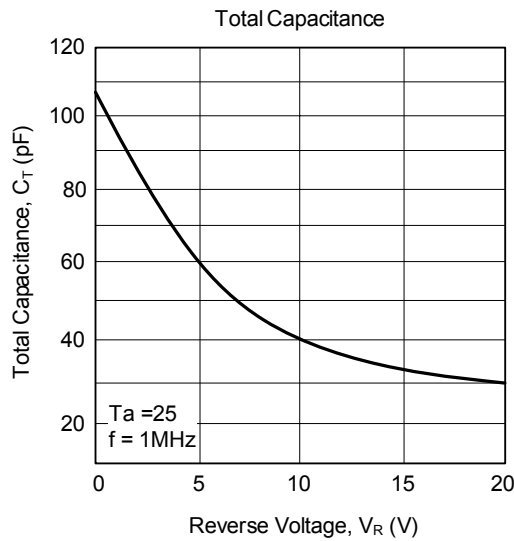
■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Thermal Resistance Junction to Ambient	θ _{JA}	244	/W

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	BV _R	I _R =20μA	40			V
Forward Voltage Drop	V _{F1}	I _F =0.5A			0.51	V
	V _{F2}	I _F =1A			0.62	
Reverse Leakage Current	I _{R1}	V _R =20V			10	μA
	I _{R2}	V _R =40V			20	
Total Capacitance	C _T	V _R =1V, f=1MHz			170	pF
Typical Reverse Recovery Time	t _{RR}	I _F =I _R =10mA, R _L =100Ω, recover to 0.1 x I _R			4	ns

■ TYPICAL CHARACTERISTICS



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