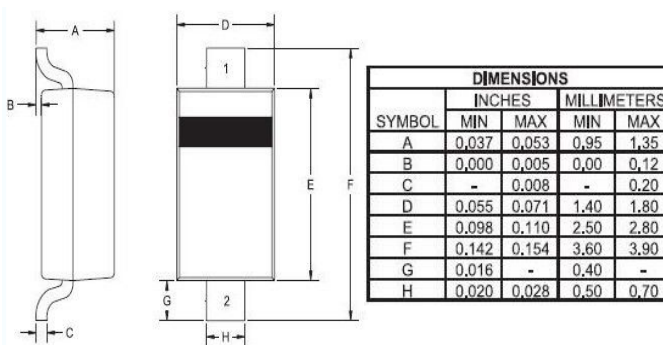


FEATURES

Low Forward Voltage Drop
Fast Switching
Small Surface Mount Package
PN Junction Guard Ring for Transient and ESD Protection
Available in Lead Free Version

MARKING: L9

SOD123



Maximum Ratings @Ta=25°C

Parameter	Symbol	Limit	Unit
DC blocking voltage	V_R	30	V
RMS reverse voltage	$V_{R(RMS)}$	21	
Average rectified output current	I_o	100	mA
Forward continuous current	I_F	200	mA
Repetitive peak forward current	I_{FRM}	300	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	600	mA
Power dissipation	P_d	500	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	200	°C/W
Operating Junction Temperature Range	T_J	-40 ~ +125	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

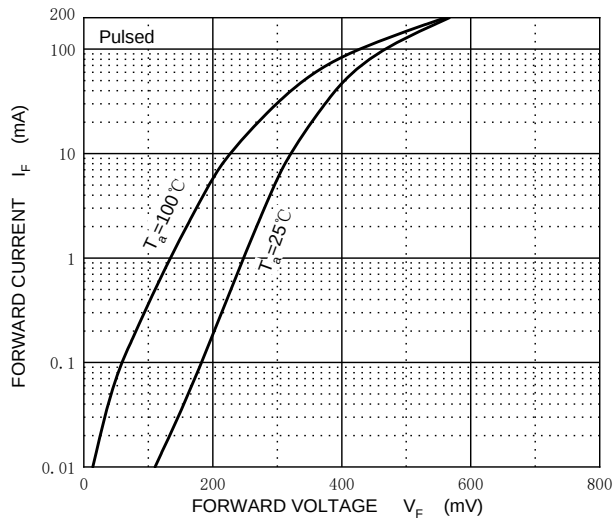
BAT54W

Electrical Characteristics @Ta=25°C

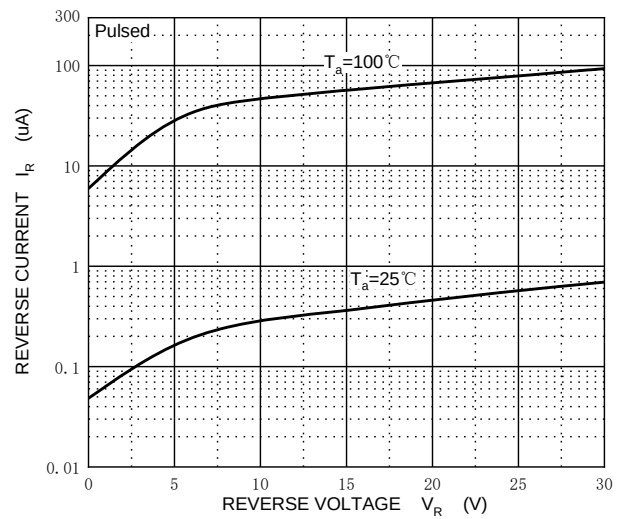
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	30			V
Forward voltage	V_{F1}	$I_F=0.1mA$			240	mV
	V_{F2}	$I_F=1.0mA$			320	mV
	V_{F3}	$I_F=10mA$			400	mV
	V_{F4}	$I_F=30mA$			500	mV
	V_{F5}	$I_F=100mA$			1000	mV
Reverse current	I_R	$V_R=25V$			2.0	μA
Reverse recovery time	t_{rr}	$I_F=10mA$, $I_R=10mA$ to $1mA$, $R_L=100\Omega$			5.0	ns
Capacitance between terminals	C_T	$V_R=1V, f=1MHz$			10	pF

RATING AND CHARACTERISTIC CURVES (BAT54W)

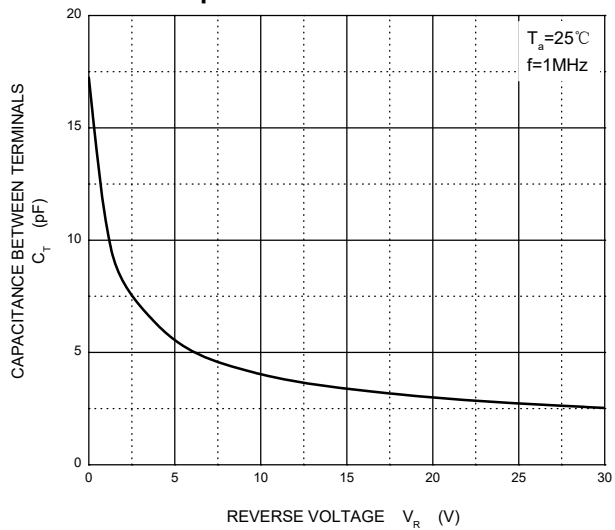
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

