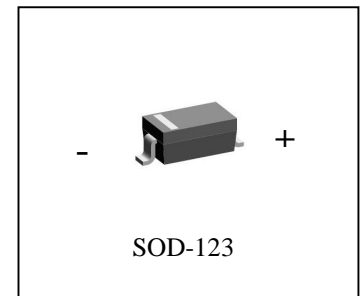


SCHOTTKY DIODE
BAT54W
FEATURES

Low forward voltage
Ultra high-speed switching


MARKING: L9
MAXIMUM RATINGS (TA=25 °C unless otherwise noted)

Parameter	Symbol	Value	Units
DC Blocking Voltage	V_R	30	V
RMS reverse voltage	$V_{R(RMS)}$	21	V
Average Rectified Output Current	I_O	100	mA
Forward continuous Current	I_F	200	mA
Repetitive peak Forward Current	I_{FRM}	300	mA
Power Dissipation	F_{SM}	600	mA
Thermal resistance junction to ambient air	P_d	500	mW
Junction temperature	$R_{\theta JA}$	250	°C/W
Storage temperature range	T_J	150	°C
Power Dissipation	T_{STG}	-65-150	°C

ELECTRICAL CHARACTERISTICS (Tamb=25 °C unless otherwise specified)

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

BAT54W Typical Characteristics

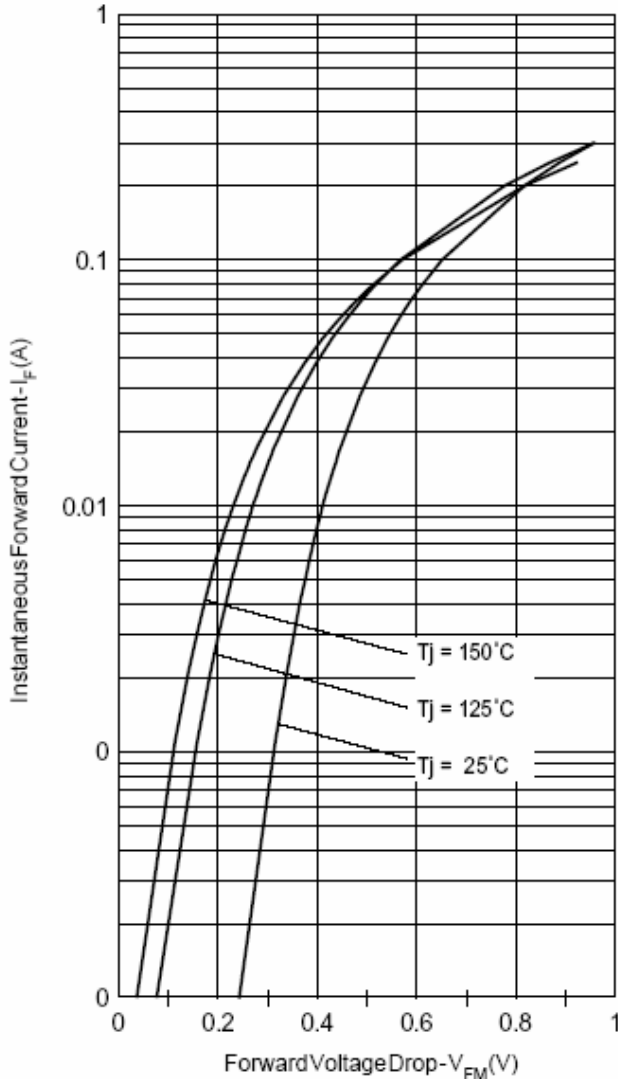


Fig. 1 - Max. Forward Voltage Drop Characteristics (Per Leg)

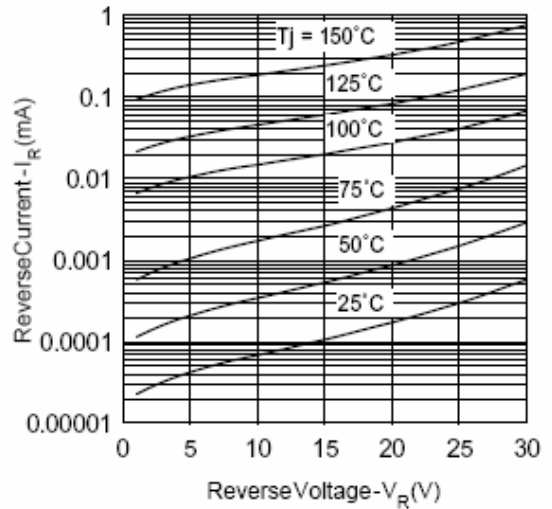


Fig. 2 - Typical Values Of Reverse Current Vs. Reverse Voltage (Per Leg)

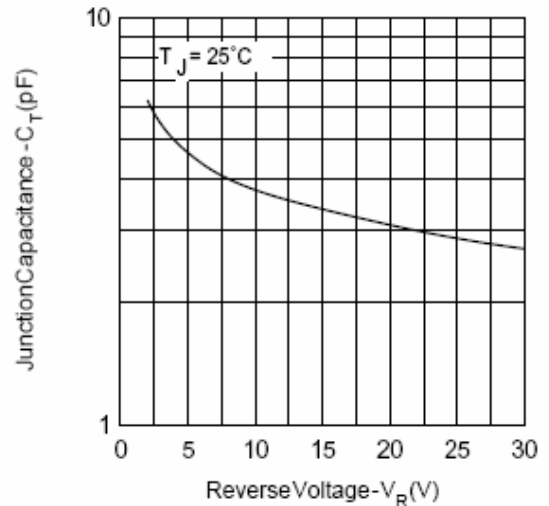


Fig. 3 - Typical Junction Capacitance Vs. Reverse Voltage (Per Leg)

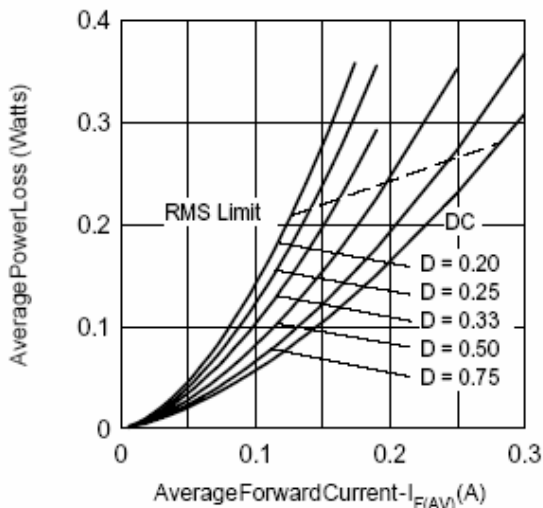


Fig. 4 - Forward Power Loss Characteristics

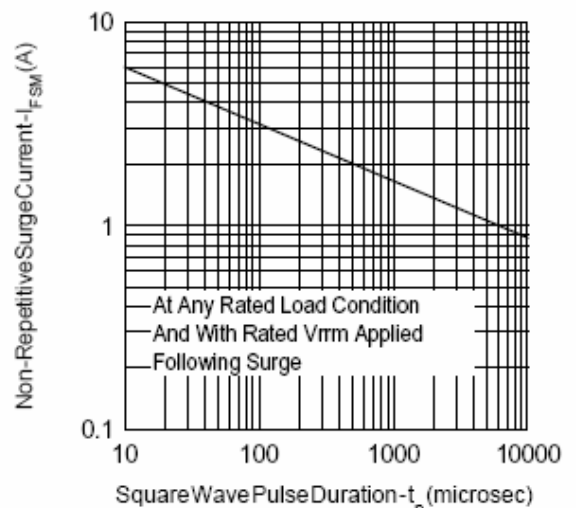


Fig. 5 - Max. Non-Repetitive Surge Current