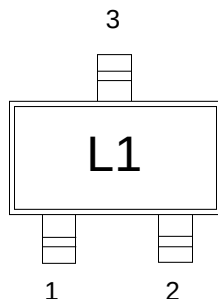


Features

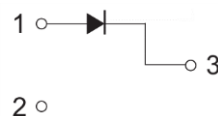
- Extremely Fast Switching Speed
- Low Forward Voltage



Marking and pin assignment



SOT-723 top view



Schematic diagram



Halogen-Free

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Symbol	Parameter	Limit	Unit
V_{RRM}	Peak Repetitive Peak Reverse Voltage	30	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	21	V
I_O	Average Rectified Output Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3ms$	600	mA
I_{FRM}	Repetitive Peak Forward Current @ $t \leq 1s, \delta \leq 0.5$	300	mA
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	667	°C/W
T_j	Operating Junction Temperature Range	-40~+125	°C
T_{STG}	Operation Junction and Storage Temperature Range	-55~+150	°C

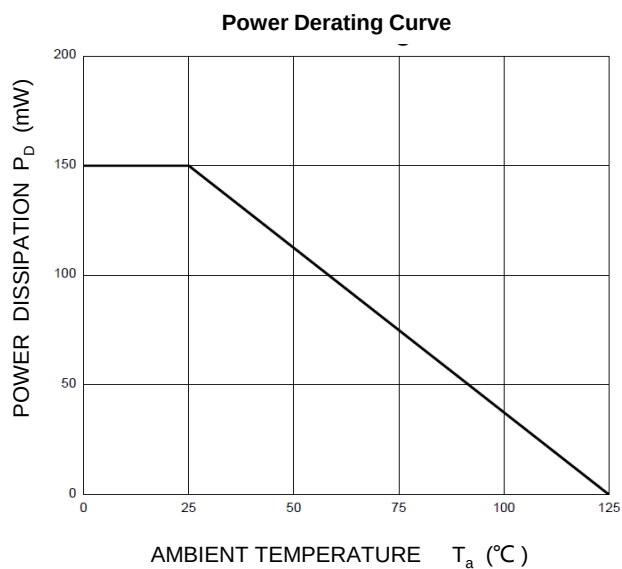
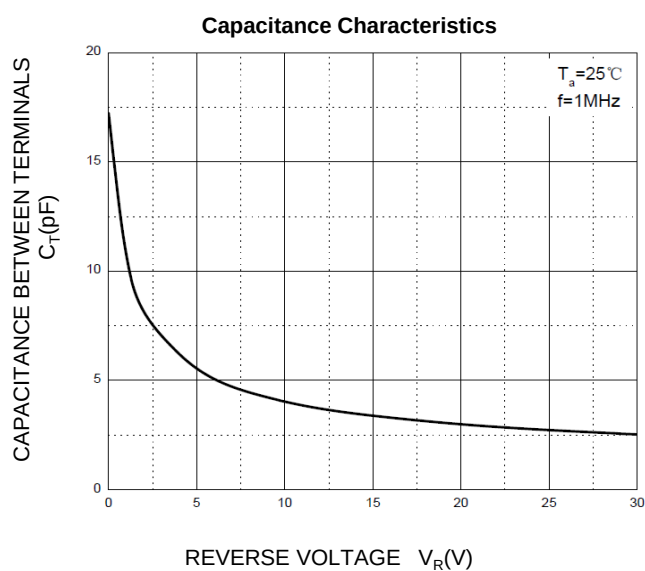
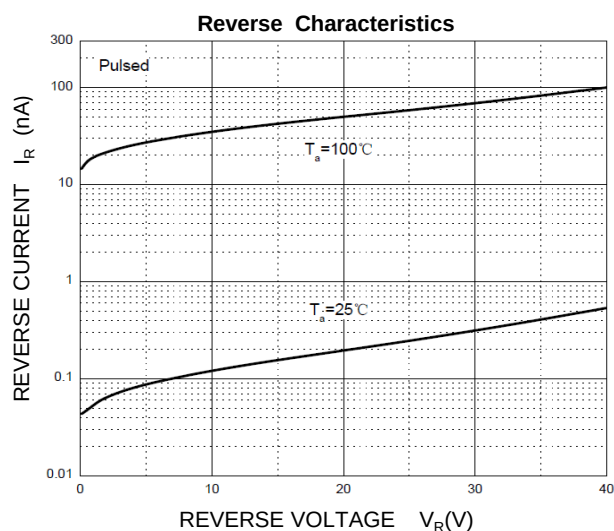
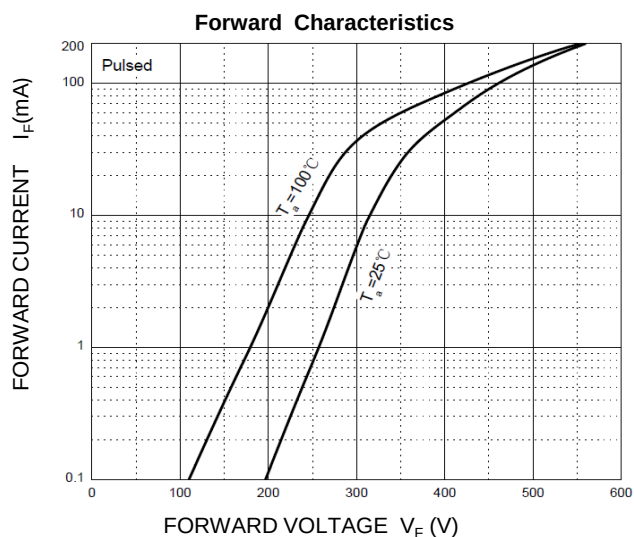
ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	$I_R=100\mu A$	30	--	--	V
I_R	Reverse current	$V_R=25V$			2	μA
V_F	Forward voltage	$I_F=0.1mA$	--	--	0.24	V
		$I_F=1mA$	--	--	0.32	
		$I_F=10mA$	--	--	0.4	
		$I_F=30mA$	--	--	0.5	
		$I_F=100mA$	--	--	1	
C_T	Capacitance between terminals	$V_R=1V, f=1MHz$	--	--	10	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10mA, I_{R(REC)}=1mA$	--	--	5	ns

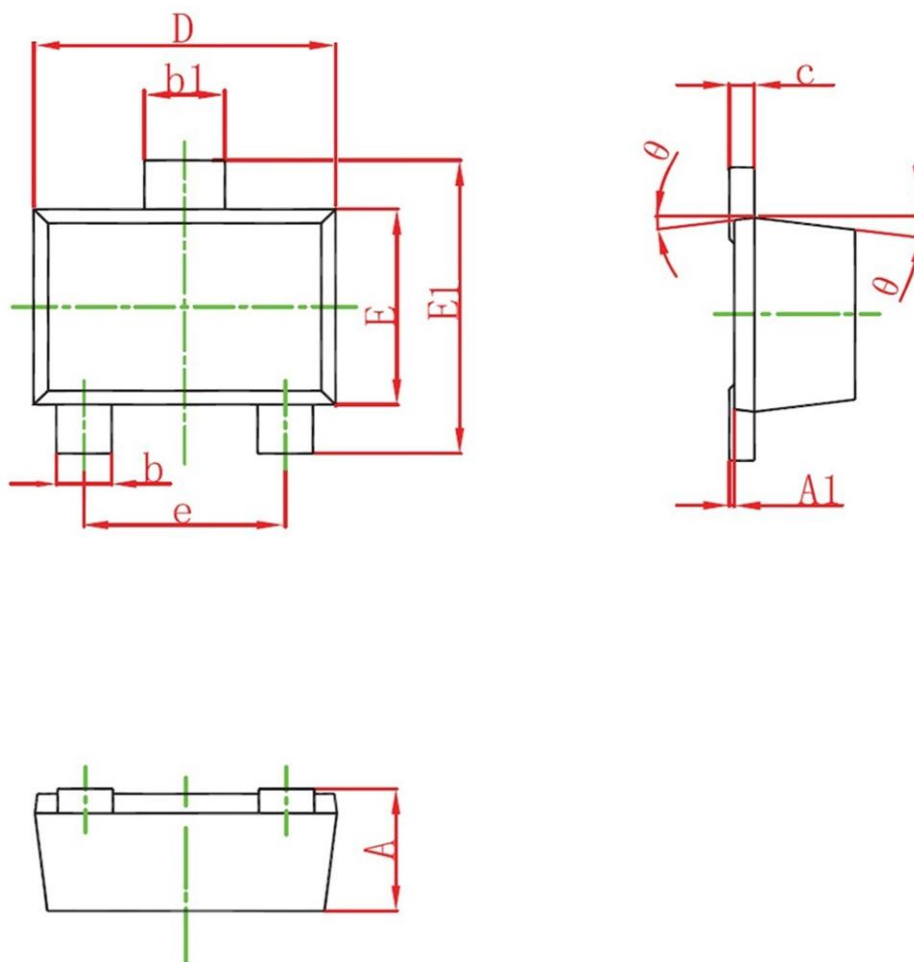
Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
BAT54M	SOT-723	L1	8,000	120,000	480,000	7"reel

Typical Operating Characteristics



SOT-723 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.320	0.400	0.012	0.016
A1	0.000	0.050	0.000	0.002
b	0.170	0.270	0.006	0.010
b1	0.270	0.370	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.150	1.250	0.046	0.050
E	0.750	0.850	0.030	0.034
E1	1.150	1.250	0.046	0.050
e	0.800TYP		0.020TYP	
θ	7°REF		7°REF	