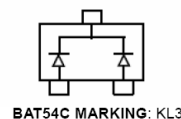


SOT-23

Features

- Extremely Fast Switching Speed


MARKING:

BAT54	BAT54A	BAT54C	BAT54S

Solid dot = Green molding compound device, if none, the normal device.

Maximum Ratings & Thermal Characteristics

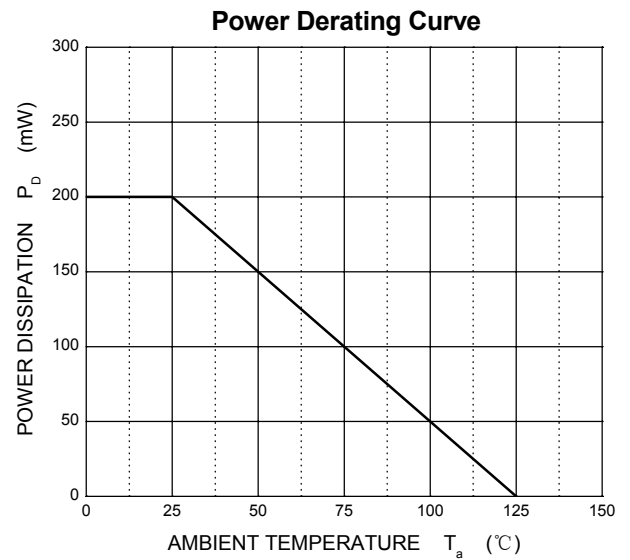
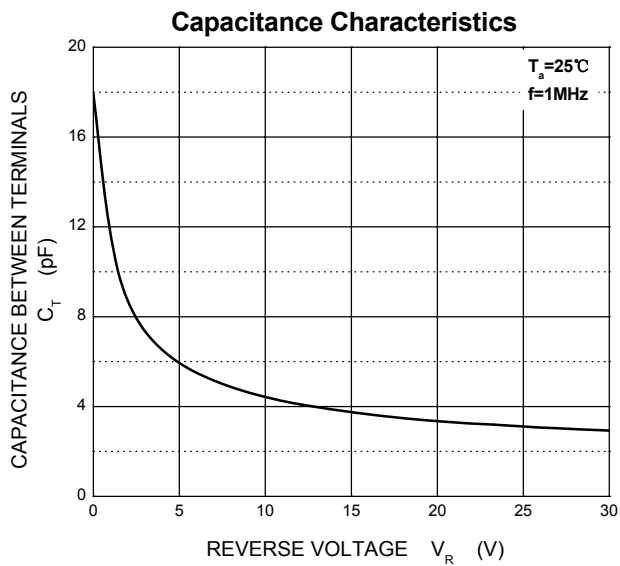
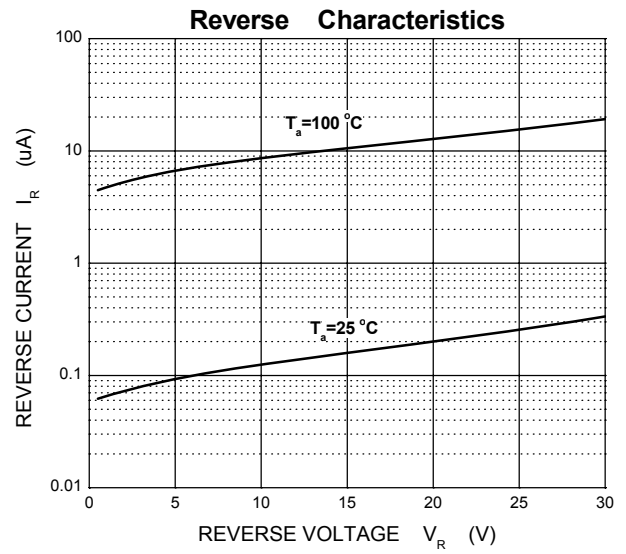
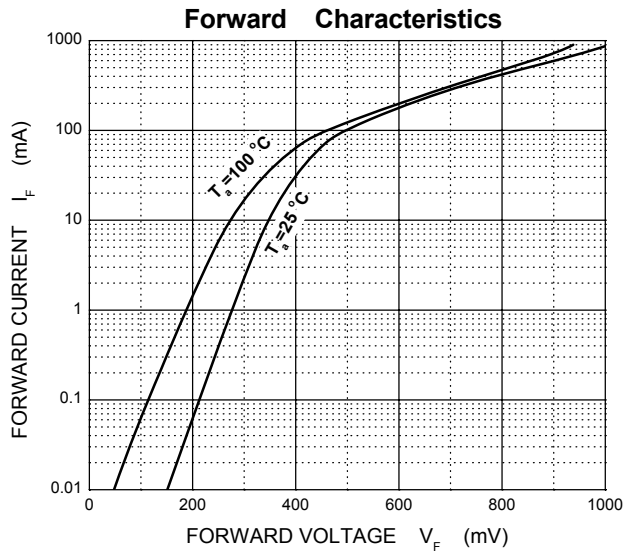
(Ratings at 25°C ambient temperature unless otherwise specified.)

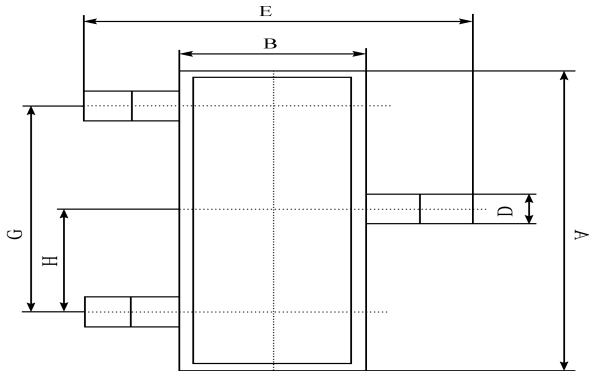
Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}		
Working Peak Reverse Voltage	V_{RWM}	30	V
DC Blocking Voltage	V_R		
Forward Continuous Current	I_{FM}	200	mA
Non-repetitive Peak Forward Surge Current @ $t=8.3ms$	I_{FSM}	600	mA
Repetitive Peak Forward Current @ $t \leq 1s, \delta \leq 0.5$	I_{FRM}	300	mA
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	°C/W
Junction Temperature	T_j	125	°C
Storage Temperature	T_{stg}	-55~+150	°C

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Min	Typ	Max	Unit	Test conditions
Reverse voltage	$V_{(BR)}$		30		V	$I_R=100\mu A$
Forward voltage	V_F			0.24	V	$I_{F1}=0.1mA$
				0.32	V	$I_{F2}=1mA$
				0.40	V	$I_{F3}=10mA$
				0.50	V	$I_{F4}=30mA$
				1	V	$I_{F5}=100mA$
Reverse current	I_R			2	μA	$V_R=25V$
Diode capacitance	C_D			10	pF	$V_R=1V, f=1MHz$
Reverse recovery time	t_{rr}			5	ns	$I_F=I_R=10mA$ $I_{rr}=0.1 \times I_R, R_L=100 \Omega$



SOT-23 PACKAGE OUTLINE Plastic surface mounted package


SOT-23	
A	2.90 ± 0.10
B	1.30 ± 0.10
C	1.00 ± 0.10
D	0.40 ± 0.10
E	2.40 ± 0.20
G	1.90 ± 0.10
H	0.95 ± 0.05
J	0.13 ± 0.05
K	0.00-0.10
M	≥ 0.2
N	0.60 ± 0.10
P	7 ± 2°

(UNIT): mm

