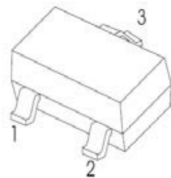


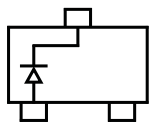
FEATURES

- Fast switching speed.
- For general purpose switching applications.
- High conductance.

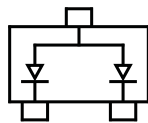


Marking

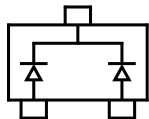
BAT54:KL1



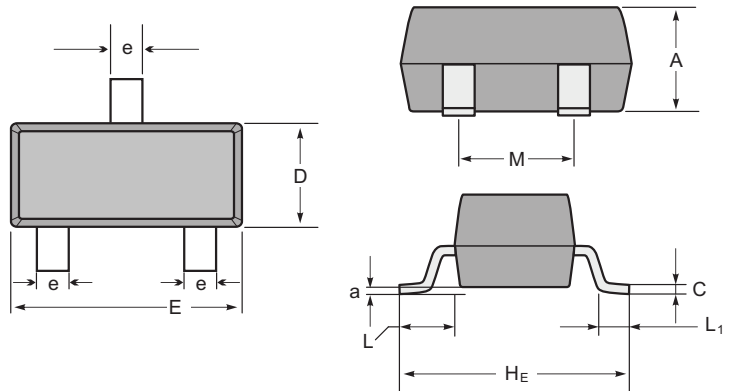
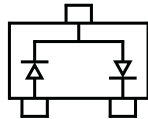
BAT54A:KL2



BAT54C:KL3



BAT54S:KL4



SOT-23 mechanical data

UNIT		A	C	D	E	HE	e	M	L	L ₁	a
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55 (ref)	0.36 (ref)	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7			0.15
mil	max	43	6	55	118	102	20	77	22 (ref)	14 (ref)	0.0
	min	35	3	47	110	87	12	67			6

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

Symbol	Parameter	Vaule	Unit
V _R	Reverse Voltage	30	V
I _F	Forward Current	0.2	A
I _{FM(SURGE)}	Peak Forward Surge Current	0.6	A
P _D	Total Device Dissipation	0.2	W
R _{θJA}	Thermal Resistance Form Junction to Ambient	500	°C/W
T _J	Junction Temperature	125	°C
T _{STG}	Storage Temperature	-55~+150	°C

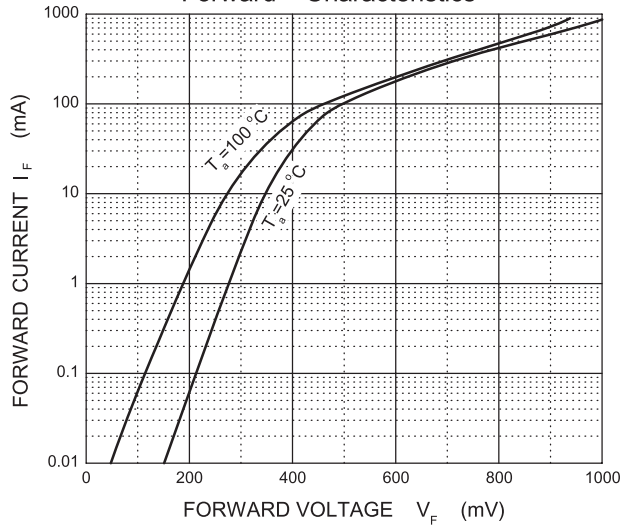
BAT54 / A / C / S

ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

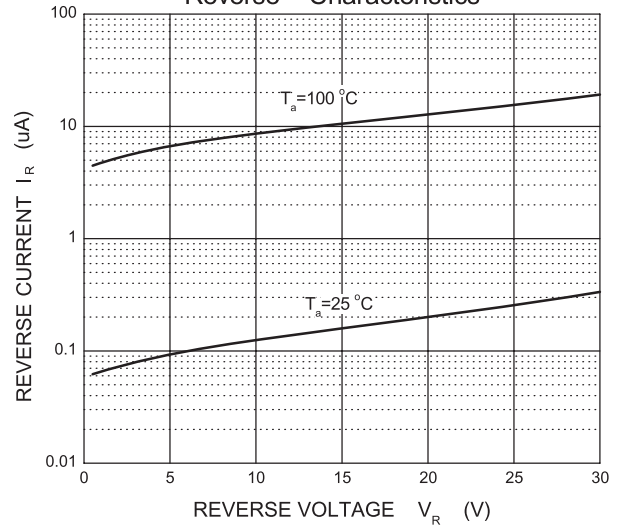
Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Units
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	30			V
Forward voltage	V_{F1}	$I_F=0.1mA$			0.24	
	V_{F2}	$I_F=1mA$			0.320	V
	V_{F3}	$I_F=10mA$			0.4	V
	V_{F4}	$I_F=30mA$			0.5	V
	V_{F5}	$I_F=100mA$			1	V
Reverse current	I_R	$V_R=25V$			2	μA
Diode capacitance	C_D	$V_R=1V, f=1MHz$			10.0	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10mA,$ $I_{RR}=0.1 \times I_R, R_L=100\Omega$			5	nS

RATING AND CHARACTERISTIC CURVES (BAT54/A/C/S)

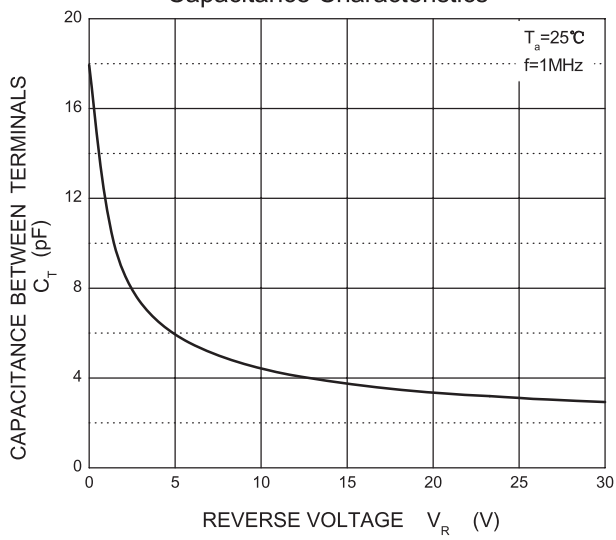
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

