

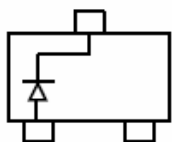
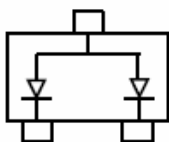
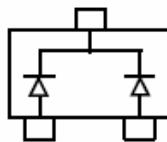
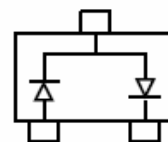
»Features

- Low forward voltage drop
- High current capability
- High reliability
- Extremely Fast Switching Speed



»General Description

- Case: molded plastic
- Package: SOT-323 Plastic Package


BAT54W:KL5

BAT54AW:KL6

BAT54CW:KL7

BAT54SW:KL8

» Maximum Ratings @T_A=25°C unless otherwise noted

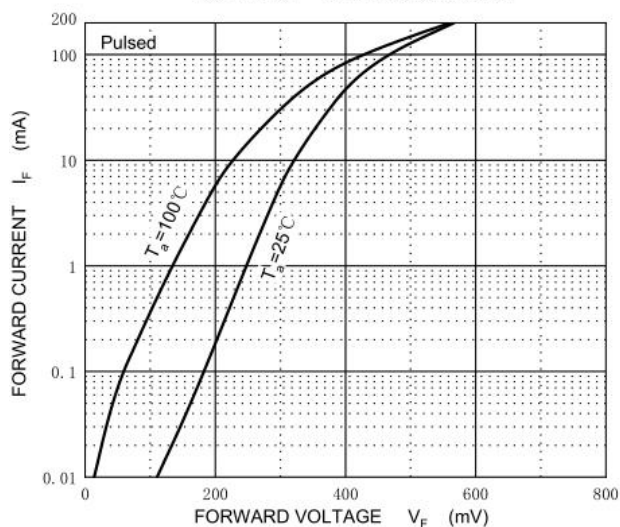
Symbol	Parameter	Value	Unit
V _{RRM} V _{RWM} V _R	Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	30	V
I _{FM}	Forward Continuous Current	200	mA
I _{FSM}	Non-repetitive Peak Forward Surge Current@8.3mS	600	mA
I _{FRM}	Repetitive Peak Forward Current	300	mA
P _d	Power Dissipation	200	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	500	°C/W
T _J	Operation Junction Temperature Range	-40~+125	°C
T _{STG}	Storage Temperature Range	-55~+150	°C

»Electrical Characteristics @T_A=25°C unless otherwise noted

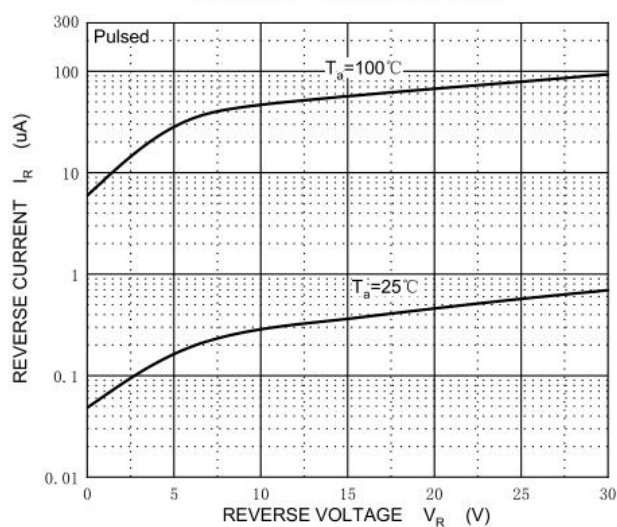
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
V _(BR)	Reverse breakdown voltage	I _R =100μA	30			V
I _R	Reverse current	V _R =25V			2	μA
V _F	Forward voltage	I _F =0.1mA			0.24	V
		I _F =1mA			0.32	V
		I _F =10mA			0.40	V
		I _F =30mA			0.50	V
		I _F =100mA			1.0	V
C _D	Diode Capacitance	V _R =1V, f=1MHz			10	pF
t _{rr}	Reverse recovery time	I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100Ω			5	nS

»Typical Performance Characteristics (($T_J = 25^\circ\text{C}$, unless otherwise noted))

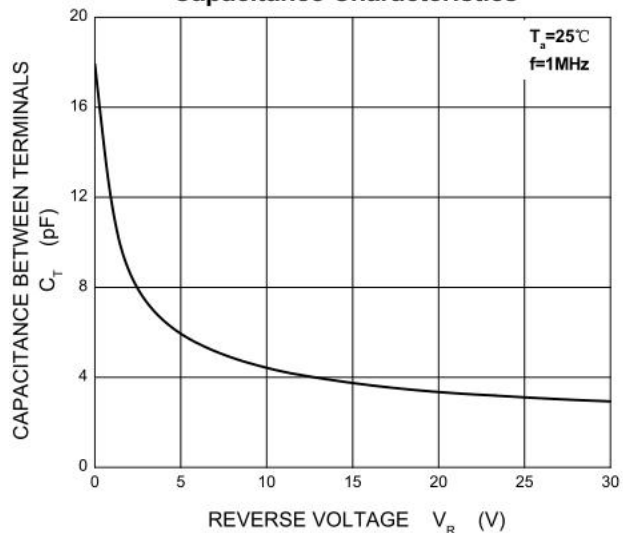
Forward Characteristics



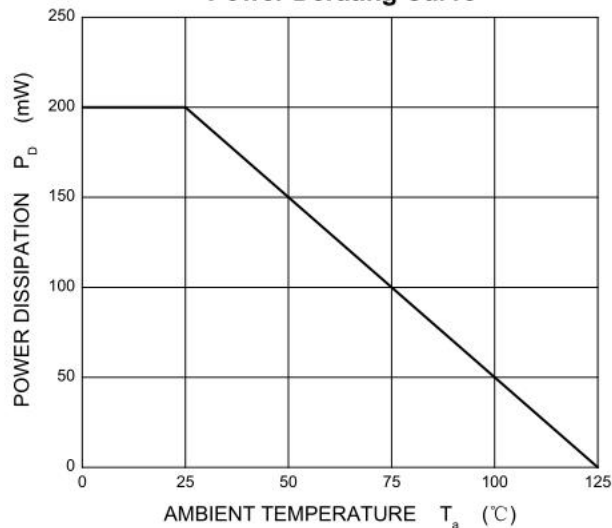
Reverse Characteristics



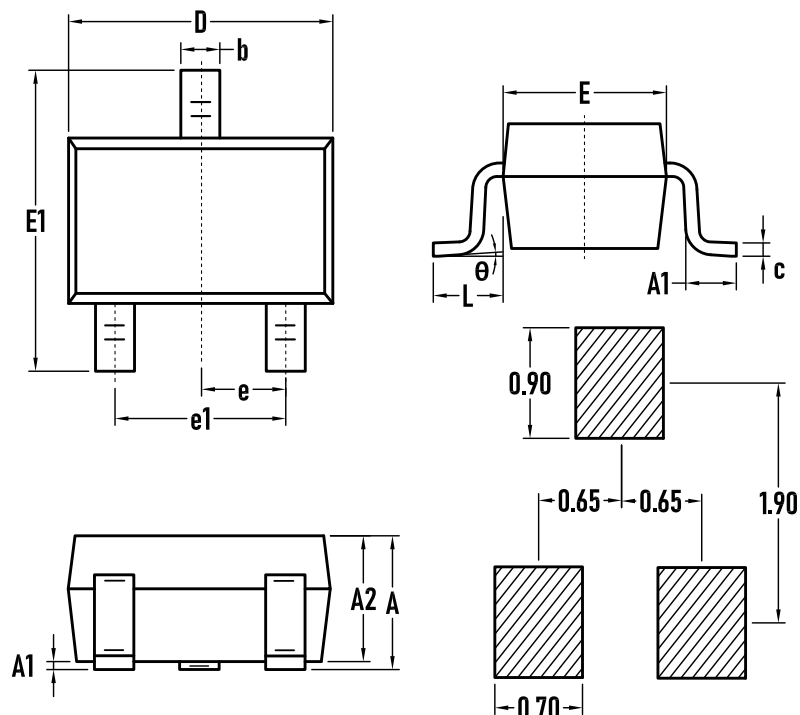
Capacitance Characteristics



Power Derating Curve



»Package Information - SOT-323



SYMBOL	MILLIMETER		
	MIN.	Typ.	MAX.
A	0.90	1.00	1.10
A1	0.00	0.05	0.10
A2	0.90	0.95	1.00
b	0.15	0.25	0.35
c	0.10	0.12	0.15
D	1.80	2.00	2.20
E	2.15	2.25	2.35
E1	1.15	1.25	1.35
e	0.650Typ.		
e1	1.20	1.30	1.40
L	0.26	0.36	0.46
θ	0	4°	8°

»Ordering information

Order code	Package	Marking	Base qty	Delivery mode
BAT54W	SOT-323	KL5	3K	Tape and reel
BAT54AW	SOT-323	KL6	3K	Tape and reel
BAT54CW	SOT-323	KL7	3K	Tape and reel
BAT54SW	SOT-323	KL8	3K	Tape and reel