

200mW 30V Schottky Barrier Diode



RoHS
Compliant



Features:

- Low forward voltage
- Fast switching speed
- Surface device type mounting.
- Moisture sensitivity level 1
- Matte Tin (Sn) lead finish with Nickel (Ni) underplate

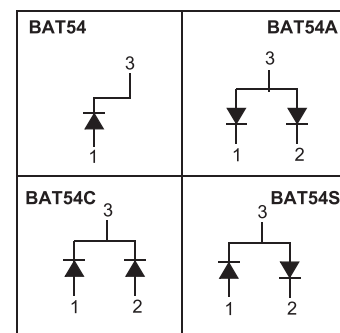
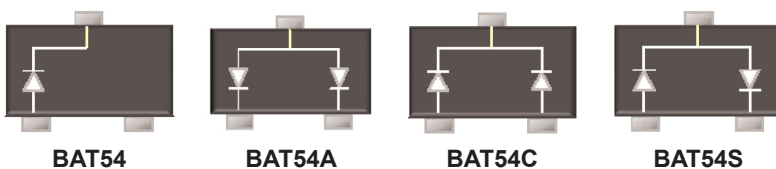
Maximum Ratings and Electrical Characteristics

Rating at 25°C Ambient Temperature Unless Otherwise Specified.

Characteristic	Symbol	Rating	Units
Continuous Reverse Voltage	V_R	30	V
Forward Continuous Current	I_F	200	mA
Non-Repetitive Peak Forward Current $t < 1s$	I_{FSM}	0.6	A
Total Power Dissipation @ $T_A = 25^\circ C$	P_D	200	mW
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ C$
Operating Junction Temperature Range	T_J	-55 to +150	$^\circ C$
Soldering Temperature During 10s	T_J	260	$^\circ C$

Characteristic	Symbol	Max.	Units
Forward Voltage (2) $I_F = 0.1mA$ $I_F = 1mA$ $I_F = 10mA$ $I_F = 30mA$ $I_F = 100mA$	V_F	240 320 400 500 1000	mV
Reverse Current ($V_R = 25V$)	I_R	2	μA
Capacitance (Measured at 1MHz, $V_R = 1V$)	C_J	10	pF
Reverse Recovery Time ($I_F = I_R = 10mA$; $I_{(REC)} = 1mA$)	t_{rr}	5	nS

Connection Diagram



200mW

30V Schottky Barrier Diode

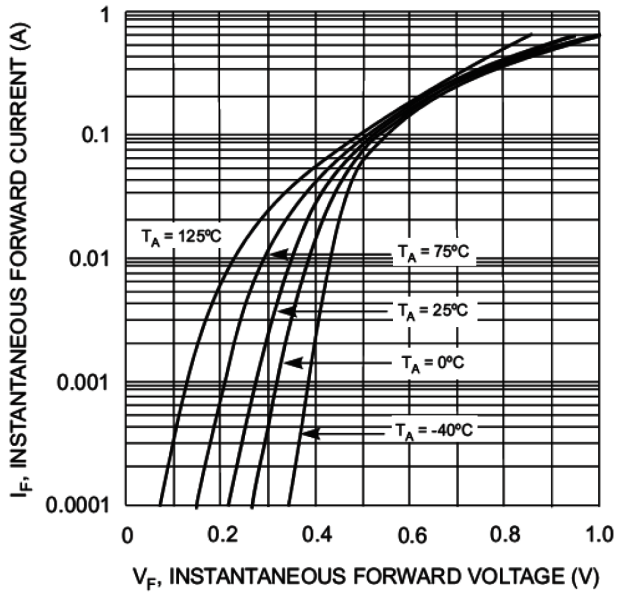


Fig. 1 Forward Characteristics

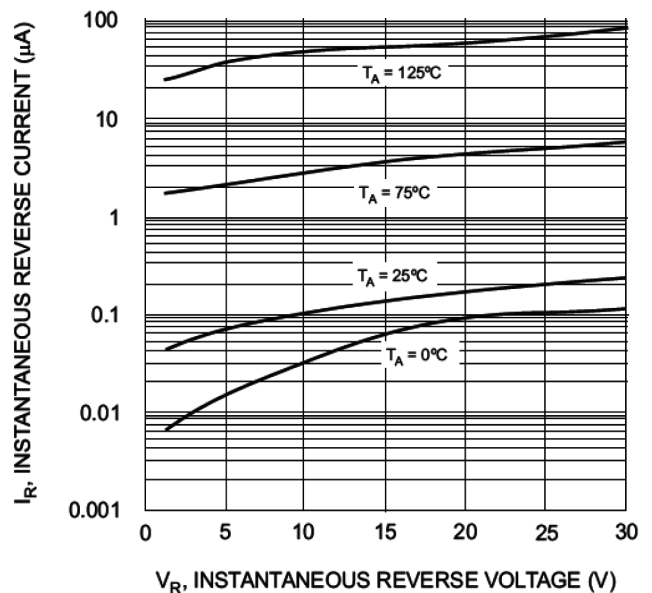


Fig. 2 Typical Reverse Characteristics

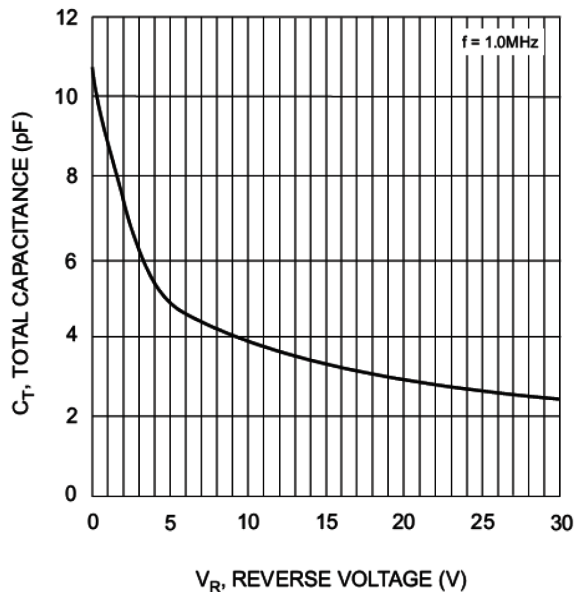


Fig. 3 Typical Capacitance vs. Reverse Voltage

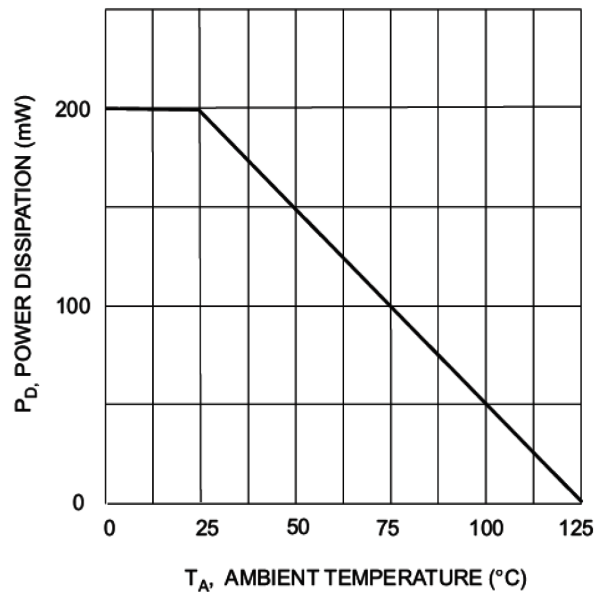


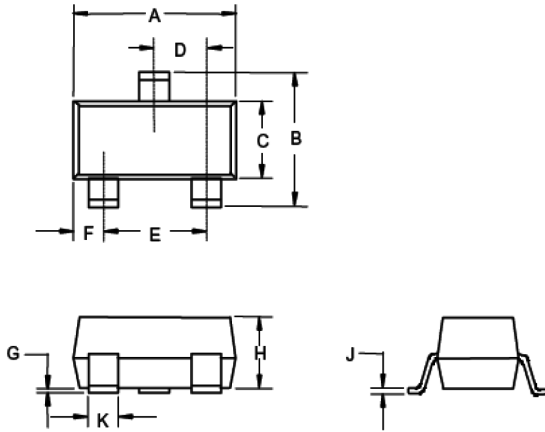
Fig. 4 Power Derating Curve



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Dimension:



SOT-23		
Dim.	Min.	Max.
A	2.8	3.04
B	2.1	2.64
C	1.2	1.4
D	0.89	1.03
E	1.78	2.05
F	0.45	0.6
G	0.013	0.1
H	0.89	1.12
J	0.085	0.18
K	0.37	0.51

Dimensions : Millimetres

Part Number Table

Description	Marking	Type	Part Number
200mW, 30V Schottky Barrier Diode, SOT-23	KL1 (L4)	Single	BAT54
	KL2 (L42)	Dual	BAT54A
	KL3 (L42)		BAT54C
	KL4 (L42)		BAT54S

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