

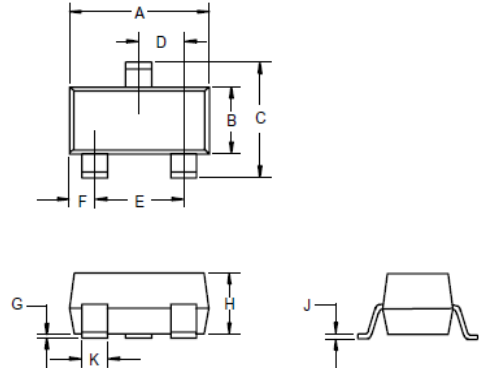
Schottky Barrier Diode

REVERSE VOLTAGE - **30** Volts
 POWER DISSIPATION - **20** mW

FEATURES

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Low Forward Voltage
- Surface Mount SOT-323 Package
- Capable of 200mWatts of Power Dissipation
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

SOT-323



Part Number	Device Marking	Type	Pin Configuration
BAT54WT	KL5	Single	Figure 1
BAT54AWT	KL6	Dual	Figure 2
BAT54CWT	KL7	Dual	Figure 3
BAT54SWT	KL8	Dual	Figure 4

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026 Nominal		0.65Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.012	.016	.30	.40	

Dimensions in inches and (millimeters)

Absolute Maximum Ratings (T_A = 25 °C)

Parameter	Symbol	Values	Unit
Continuous Reverse Voltage	V _R	30	V
Forward Current	I _F	200	mA
Repetitive Peak Forward Current	I _{FRM}	300	mA
Non-Repetitive Peak Forward Current t<1s	I _{FSM}	600	mA
Total Power Dissipation @ T _A = 25°C	P _D	200	mW
Junction temperature	T _J	-55 to +125	°C
Storage temperature range	T _{STG}	-55 to +125	°C

Characteristics at T_A = 25 °C

Parameter	Symbol	Values	Unit
Reverse Breakdown voltage	V _(BR)	30	V
Reverse current V _R = 25 V	I _R	2	uA
Forward voltage I _F = 0.1 mA I _F = 1mA I _F = 10mA I _F = 30mA I _F = 100mA	V _F	240 320 400 500 1000	mV
Total capacitance V _R = 1V, f = 1 MHz	C _J	10	pF
Thermal Resistance, Junction to Ambient	R _{θJA}	500	K/W
Reverse Recovery Time at I _F =I _R =10mA, I _{RR} =0.1*I _R , R _L =100Ω	T _{RR}	5	ns

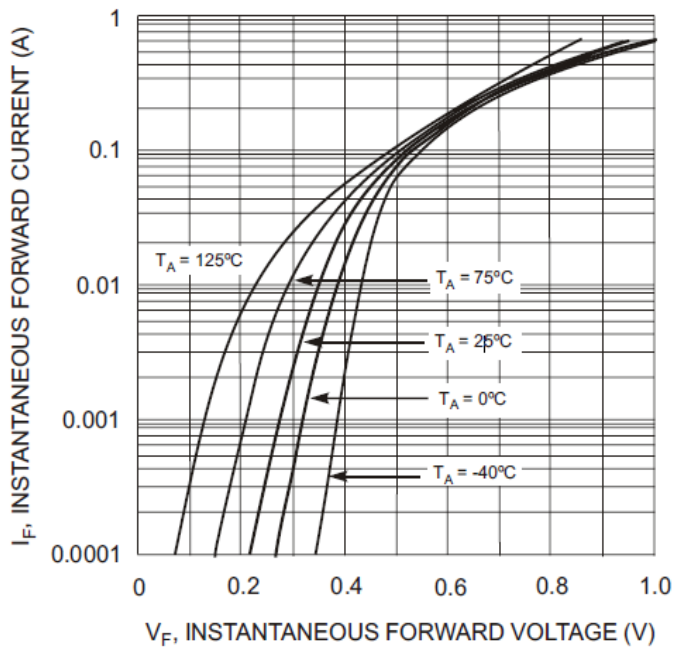


Fig. 1 Forward Characteristics

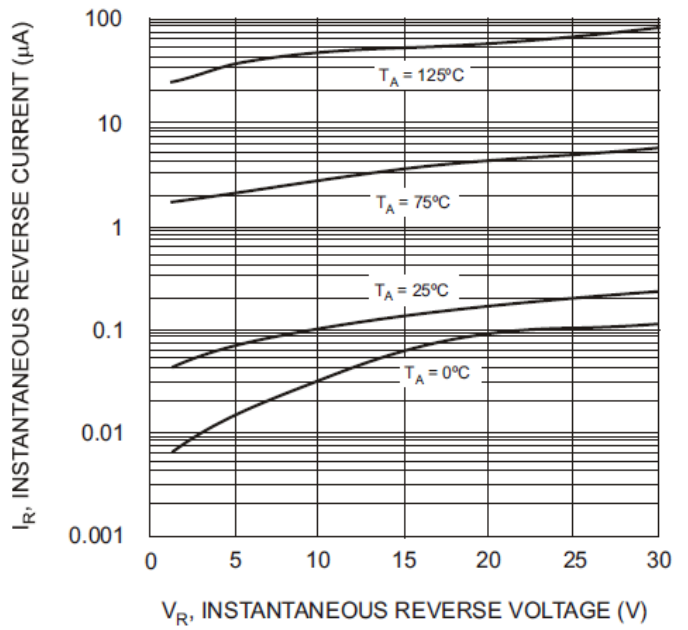


Fig. 2 Typical Reverse Characteristics

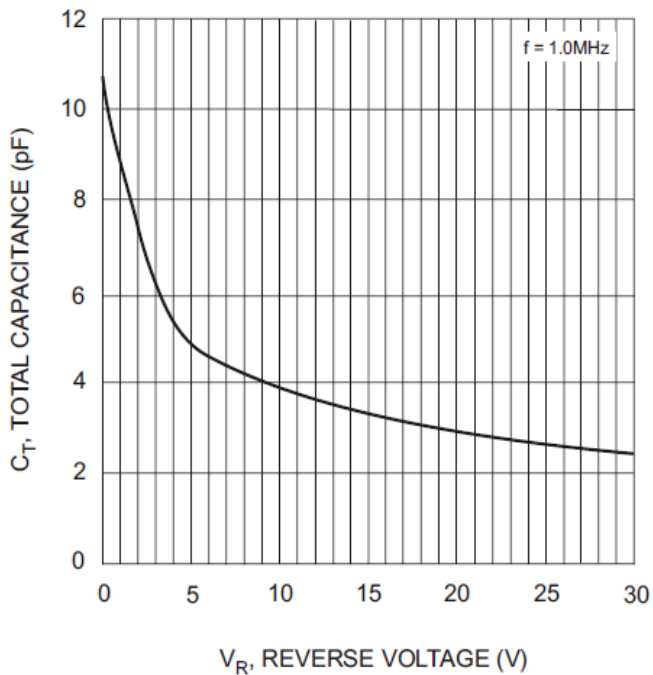


Fig. 3 Typical Capacitance vs. Reverse Voltage

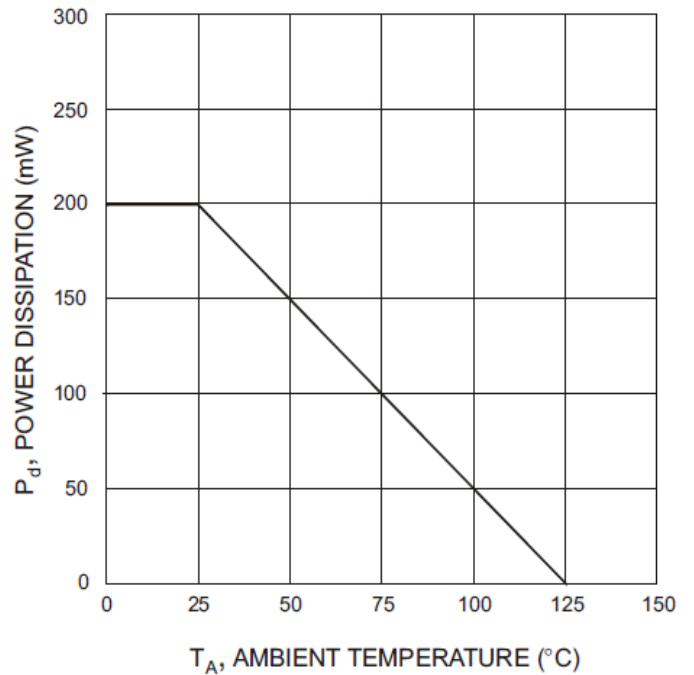


Fig. 4 Power Derating Curve

Pin Configuration - Top View

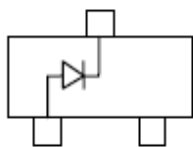


Figure 1

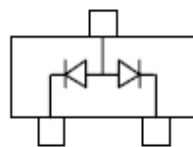


Figure 2

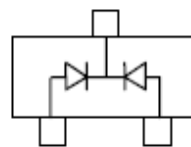


Figure 3

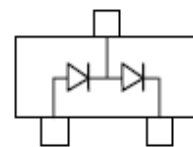


Figure 4

The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!