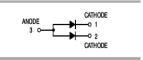
# Surface Mount Schottky Barrier Diode





#### Features:

- · Low Forward Voltage Drop
- · Fast Switching
- · Ultra-Small Surface Mount Package
- PN Junction Guard Ring For Transient and ESD Protection





SOT-523

## **Applications:**

Schottky barrier diodes

## Max. Rating @ TA = 25°C unless otherwise specified

Parameter	Symbol	Value	Unit
Peak repetitive peak reverse voltage Working peak DC reverse voltage	VRRM VRMS VR	30	V
Forward continuous voltage	lF	200	mA
Repetitive peak forward voltage	IFRM	300	mA
Non-repetitive peak forward surge current @t<1.0s	IFSM	600	mA
Power dissipation	PD	150	mW
Thermal resistance, junction to ambient	Røja	833	°C/W
Junction and storage temperature	T <sub>j</sub> , Tstg	-65 to +150	°C

## Electrical Characteristics @ TA = 25°C unless otherwise specified

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse breakdown voltage	V(BR)	IR = 100μA	30	-	V
Leakage current	lr	VR = 25V	-	2	μA
Forward voltage	VF	IF = 0.1mA IF = 1mA IF = 10mA IF = 30mA IF = 100mA	-	240 320 400 500 1,000	mV
Typical total capacitance	Ст	V <sub>R</sub> = 1V, f=1MHz	-	10	pF
Reverse recovery time	trr	I <sub>F</sub> = I <sub>R</sub> = 10mA I <sub>R</sub> = 0.1mA, R <sub>L</sub> = 100Ω	-	5	ns

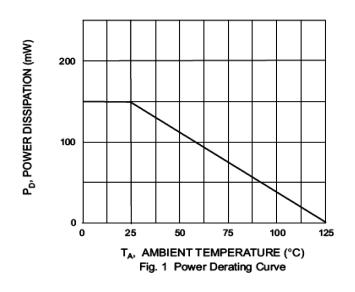
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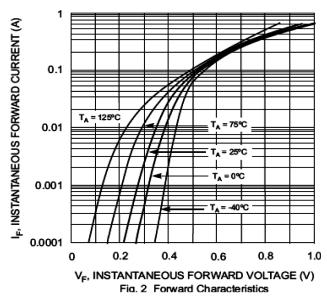


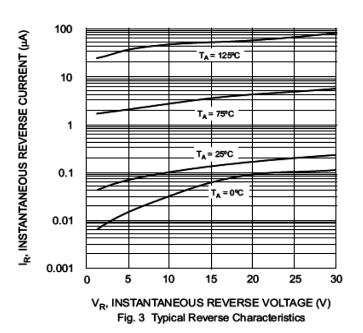
# Surface Mount Schottky Barrier Diode



## Typical Characteristics @ TA = 25°C unless otherwise specified







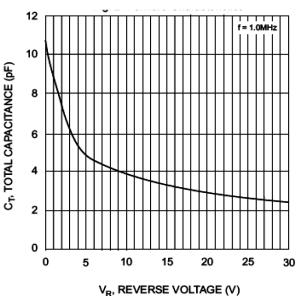
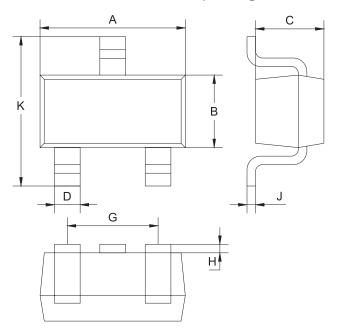


Fig. 4 Typical Capacitance vs. Reverse Voltage

# Surface Mount Schottky Barrier Diode

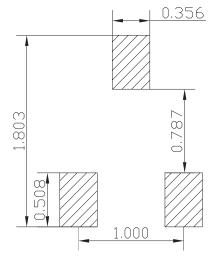


## Plastic surface mounted package



SOT-523		
Dim	Min	Max
Α	1.5	1.7
В	0.75	0.85
С	0.6	0.8
D	0.15	0.3
G	0.9	1.1
Н	0.02	0.1
J	0.1Typical	
K	1.45	1.75
All Dimensions in mm		

## **Soldering Footprint**



### **Package Information**

Device	Package	Shipping
BAT54AT-7-F	SOD-23	3,000 / Tape & Reel

### **Part Number Table**

Unit: mm

Description	Part Number
Surface Mount Schottky Barrier Diode	BAT54AT-7-F

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Page <3>

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