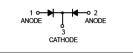
# Surface Mount Schottky Barrier Diode





#### 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 diode

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

Parameter	Symbol	Limits	Unit
Peak repetitive peak reverse voltage Working peak reverse voltage DC reverse voltage	Vrrm Vrms Vr	30	٧
Forward continuous voltage	lF	200	mA
Repetitive peak forward voltage	IFRМ	300	mA
Non-repetitive peak forward surge current @t<1.0s	lғsм	600	mA
Power dissipation	Po	150	mW
Thermal resistance, junction to ambient	Røja	833	°C/W
Junction and storage temperature	Т <sub>j</sub> , Тsтg	-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	V <sub>R</sub> = 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	$I_F = I_R = 10 \text{mA}$ $I_R = 1 \text{mA} R_L = 100 \Omega$	-	5	ns

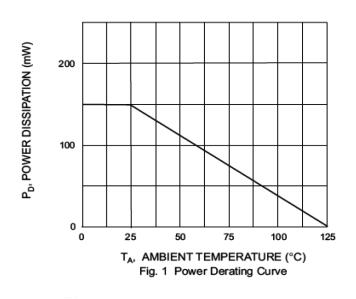


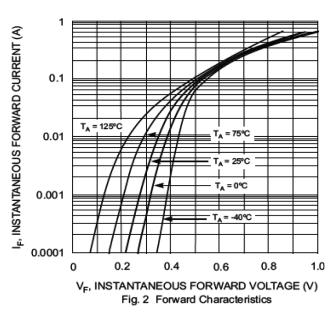


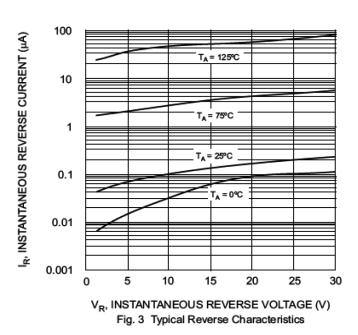
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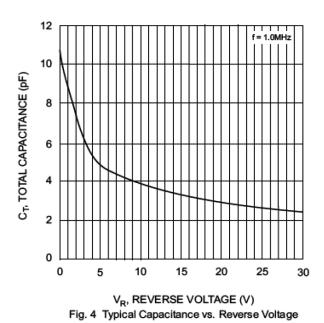


### Typical Characteristics @ TA = 25°C unless otherwise specified







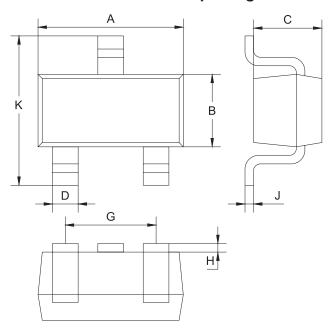


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# Surface Mount Schottky Barrier Diode

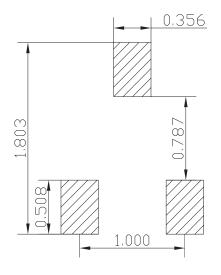


#### Plastic surface mounted package



SOT-523			
Dim	Min	Max	
А	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**

**Part Number Table** 

Device	Package	Shipping
BAT54CT-7-F	SOT-523	3,000 / Tape & Reel

#### Unit: mm

Description	Part Number	
Surface Mount Schottky Barrier Diode	BAT54CT-7-F	

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