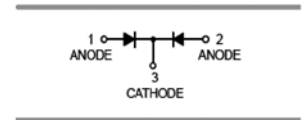


Surface Mount Schottky Barrier Diode



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 @ T_A = 25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Peak repetitive peak reverse voltage Working peak reverse voltage DC reverse voltage	V _{RRM} V _{RMS} V _R	30	V
Forward continuous voltage	I _F	200	mA
Repetitive peak forward voltage	I _{FRM}	300	mA
Non-repetitive peak forward surge current @t<1.0s	I _{FSM}	600	mA
Power dissipation	P _D	150	mW
Thermal resistance, junction to ambient	R _{θJA}	833	°C/W
Junction and storage temperature	T _j , T _{STG}	-65 to +150	°C

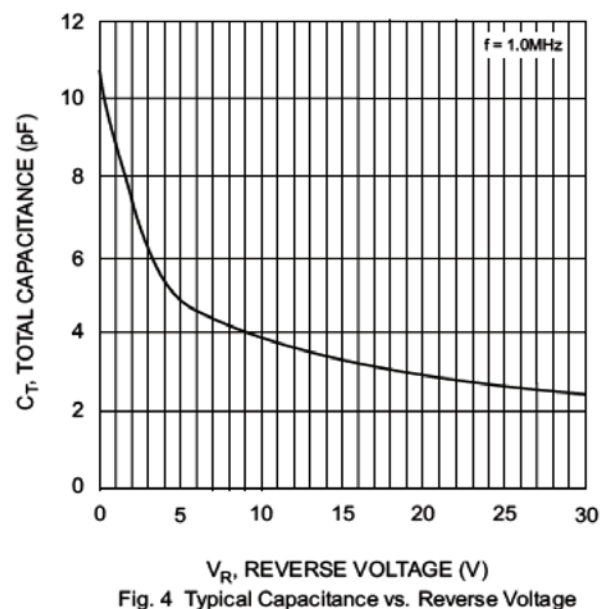
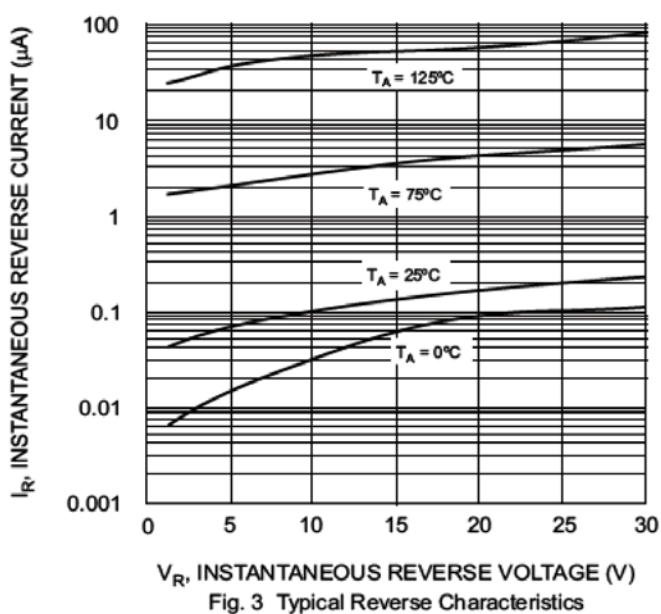
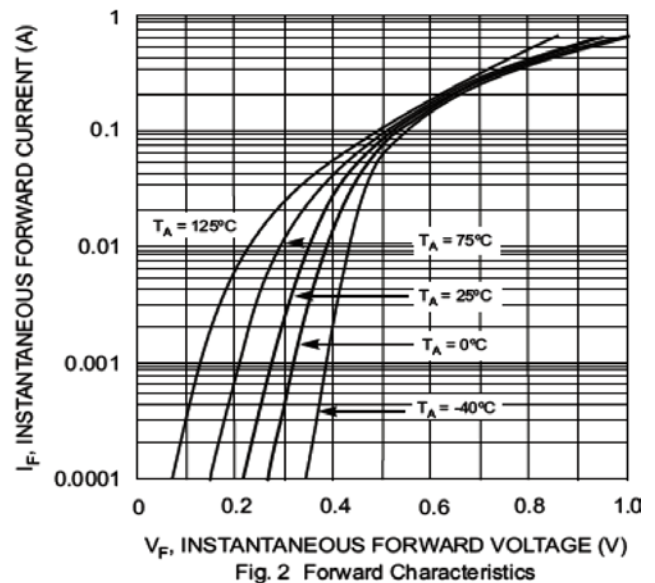
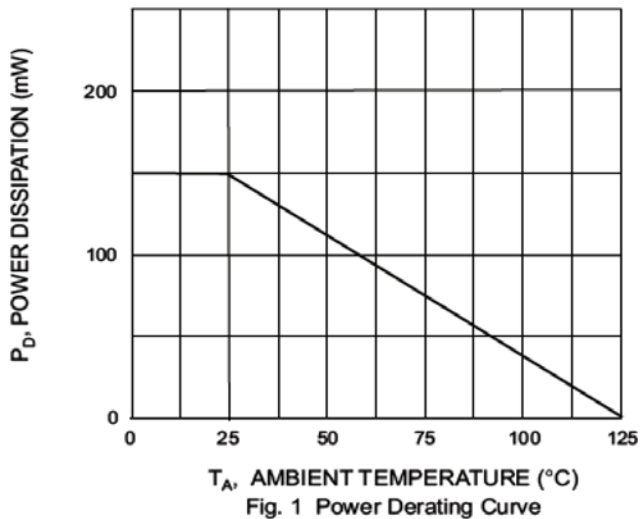
Electrical Characteristics @ T_A = 25°C unless otherwise specified

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse breakdown voltage	V _(BR)	I _R = 100μA	30	-	V
Leakage current	I _R	V _R = 25V	-	2	μA
Forward voltage	V _F	I _F = 0.1mA I _F = 1mA I _F = 10mA I _F = 30mA I _F = 100mA	-	240 320 400 500 1,000	mV
Typical total capacitance	C _T	V _R = 1V, f = 1MHz	-	10	pF
Reverse recovery time	t _{rr}	I _F = I _R = 10mA I _R = 1mA R _L = 100Ω	-	5	ns

Surface Mount Schottky Barrier Diode



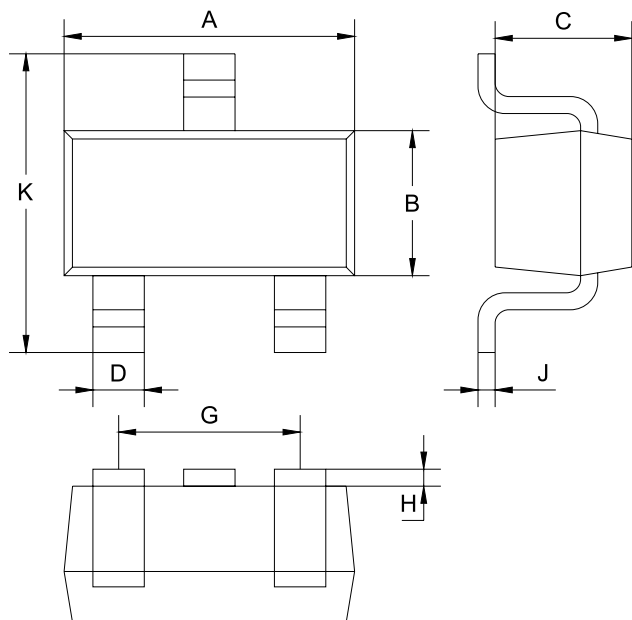
Typical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified



Surface Mount Schottky Barrier Diode

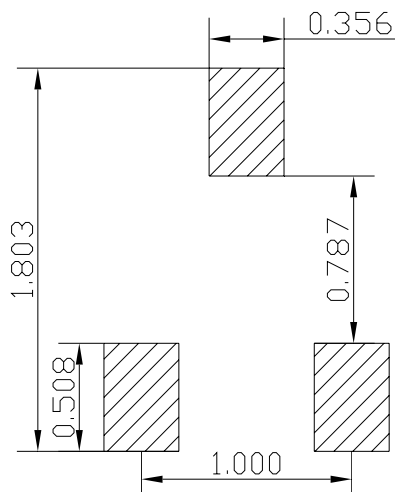


Plastic surface mounted package



SOT-523		
Dim	Min	Max
A	1.5	1.7
B	0.75	0.85
C	0.6	0.8
D	0.15	0.3
G	0.9	1.1
H	0.02	0.1
J	0.1Typical	
K	1.45	1.75
All Dimensions in mm		

Soldering Footprint



Unit : mm

Package Information

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

Part Number Table

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

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