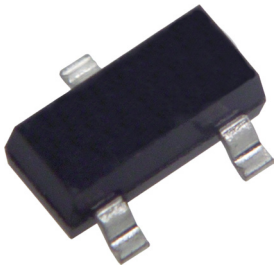


Surface Mount Schottky Barrier Diode



Applications:

- High speed switching applications.
- Circuit protecting : SOT-23
- Voltage clamping

Features:

- SOT-23 Package for surface mount application
- Protects from line to Vcc and line to ground
- Low forward voltage and reverse recovery characteristics
- Epoxy meets UL 94 V-0 flammability rating
- Moisture sensitivity Level 1
- Halogen free available upon request by adding suffix “-HF”
- Mounting Position : Any
- Weight : 0.008 grams (approx.)

Maximum Ratings:

T_A = 25°C unless otherwise specified.

Characteristic	Symbol	Limits	Unit
RMS Reverse Voltage	V _{R(RMS)}	49	V
Repetitive Peak Reverse Voltage Working Peak Reverse Voltage Diode Reverse Voltage	V _{RRM} V _{RWM} V _R	70	V
Forward Continuous Current	I _F	70	mA
Non-Repetitive Peak Forward Surge Current at t _p < 1s	I _{FSM}	100	mA
Power Dissipation	P _D	200	mW
Thermal Resistance, Junction to Ambient Air	R _{θJA}	625	°C/W
Junction and Storage Temperature Range	T _J , T _{stg}	-65 to +150	°C

Electrical Characteristics:

T_A = 25°C unless otherwise specified.

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Device Marking	-	74		-	V
Repetitive Peak Reverse Voltage	V _{RRM}	-	70	-	V
Reverse Breakdown Voltage Tested with 10µA Pulse	V _{(BR)R}	70	-	-	
Leakage Current Pulse Test t _p < 300µs @ For BAS70 V _R = 50V	I _R	-	10	200	nA
Forward Voltage Pulse Test t _p < 300µs at I _F = 1mA at I _F = 15mA	V _F	410 1000	-	-	mV

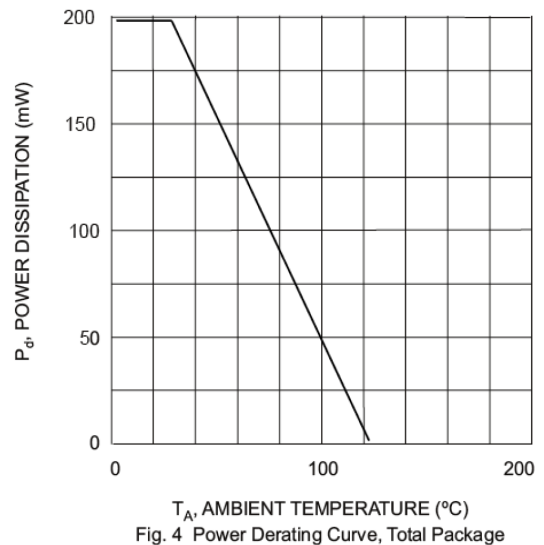
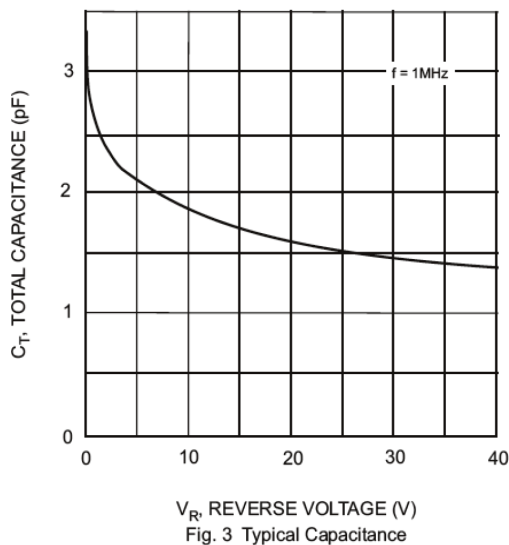
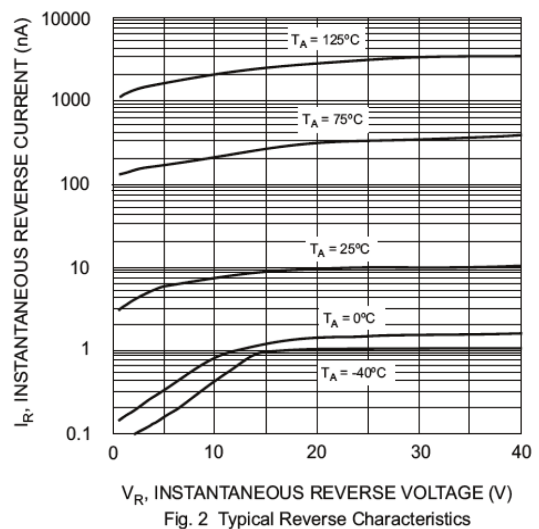
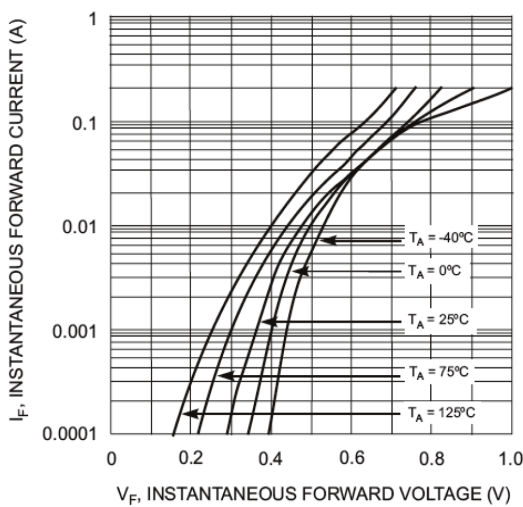
Surface Mount Schottky Barrier Diode



Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Recovery Time from $I_F = 10\text{mA}$ through $I_R = 10\text{mA}$ to $I_R = 1\text{mA}$	t_{rr}	-	-	5	ns
Thermal Resistance Junction to Ambient Air	R_{thJA}	-	-	430	k/W
Capacitance at $V_R = 0\text{V}$, $F = 1\text{MHz}$	C_{tot}	-	-	2	pF

Typical Characteristics:

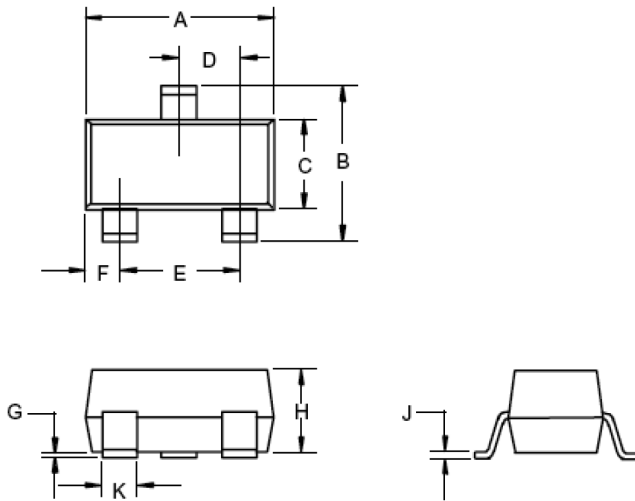
$T_A = 25^\circ\text{C}$ unless otherwise specified.



Surface Mount Schottky Barrier Diode



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	Part Number
Surface Mount Schottky Barrier Diode	BAS70-04

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