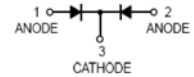


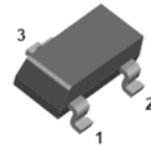
Surface Mount Schottky Barrier Diode



BAS70



BAS70-05



SOT-23

Features:

- Low Turn-On Voltage
- Fast Switching
- PN Junction Guard Ring for Transient And BAS70 BAS70-04 ESD Protection
- Ultra-Small Surface Mount Package
- Also Available in Lead Free Version

Applications:

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

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

Surface Mount Schottky Barrier Diode



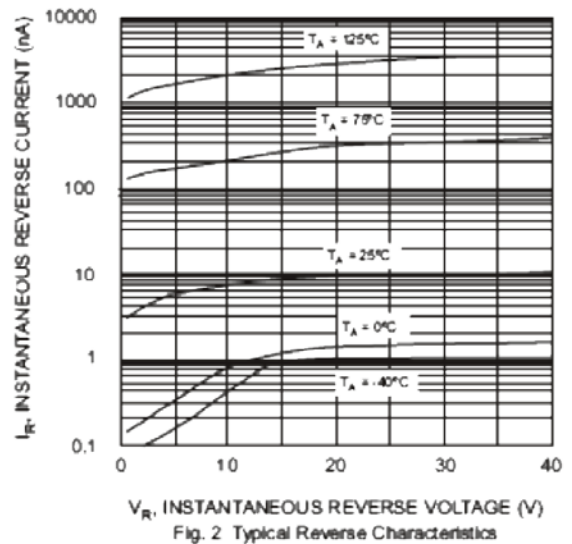
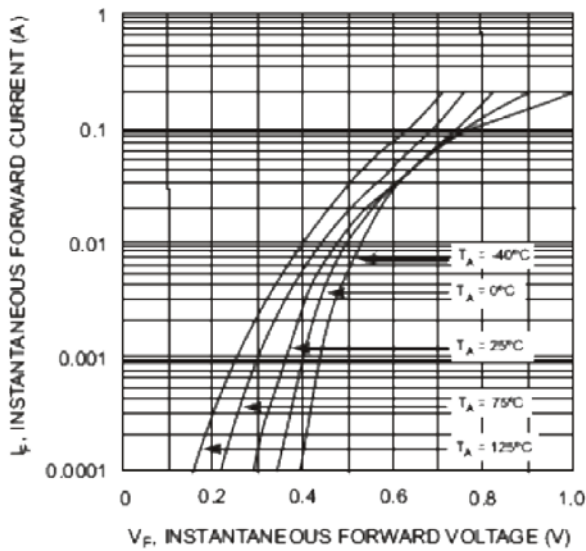
Electrical Characteristics:

T_A = 25°C unless otherwise specified.

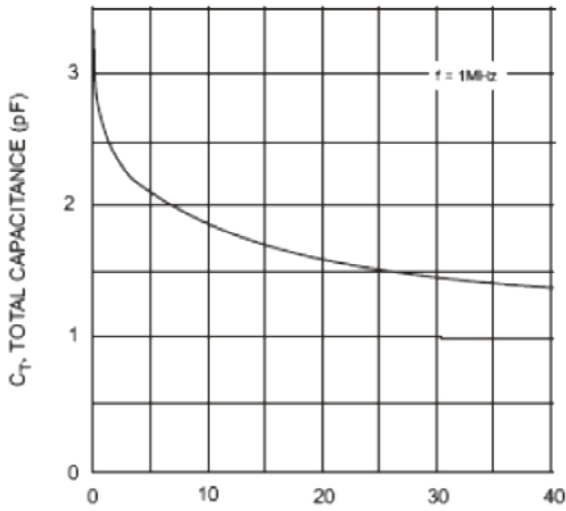
Characteristic	Symbol	Test conditions	Min.	Max.	Unit
Reverse breakdown voltage	V _{(BR)R}	I _(BR) = 10μA	70	-	V
Reverse leakage current	I _R	t _P < 300μs, V _R = 50V	-	100	nA
Forward voltage	V _F	t _P < 300μs, I _F = 1mA t _P < 300μs, I _F = 15mA	-	410 1,000	mV
Junction capacitance	C _j	V _R = 0V, f = 1MHz	-	2	pF
Reverse recovery time	t _{rr}	I _F = I _R = 10mA to I _R = 1mA, R _L = 100Ω	-	5	nS

Typical Characteristics:

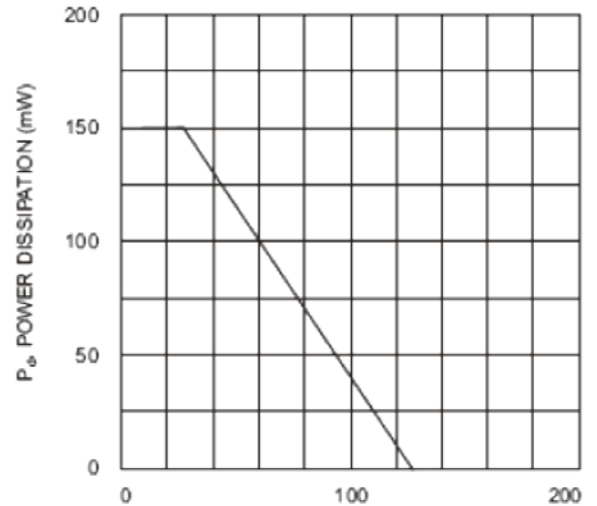
T_A = 25°C unless otherwise specified.



Surface Mount Schottky Barrier Diode



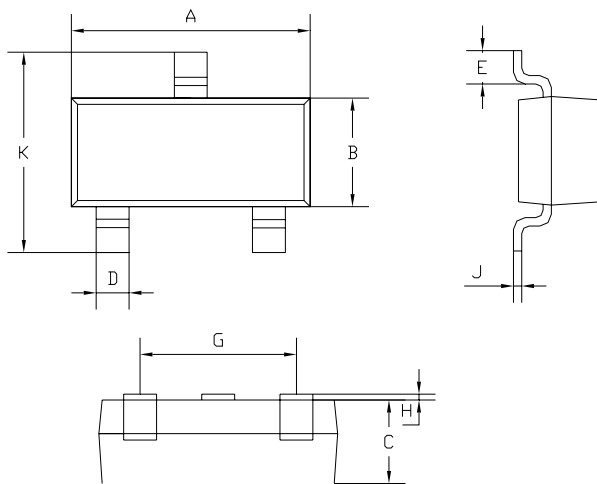
V_R, REVERSE VOLTAGE (V)
Fig. 3 Typical Capacitance



T_A, AMBIENT TEMPERATURE (°C)
Fig. 4 Power Derating Curve, Total Package

Package Outline:

Plastic surface mounted package



SOT-23		
Dim.	Min.	Max.
A	2.85	2.95
B	1.25	1.35
C	1 Typ.	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1 Typ.	
K	2.35	2.45

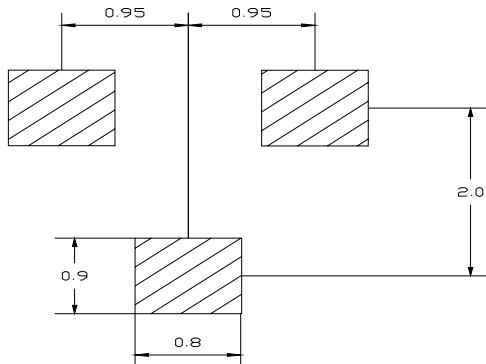
Dimensions : Millimetres



Surface Mount Schottky Barrier Diode



Soldering Footprint:



Dimensions : Millimetres

Package Information:

Device	Package	Shipping
BAS70-05-7-F BAS70-7-F	SOT-23	3,000 / Tape & Reel

Part Number Table

Description	Part Number
Surface Mount Schottky Barrier Diode	BAS70-05-7-F
	BAS70-7-F

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