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	Vrrm Vrwm Vr	70	V
Forward Continuous Current	lF	70	mA
Non-Repetitive Peak Forward Surge Current at t_{p} <1s	IFSM	100	mA
Power Dissipation	Po	200	mW
Thermal Resistance, Junction to Ambient Air	RθjA	625	°C/W
Junction and Storage Temperature Range	Tj, Tstg	-65 to +150	°C

Electrical Characteristics:

TA = 25°C unless otherwise specified.

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

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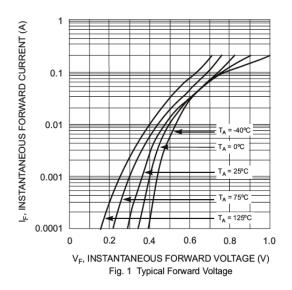
Surface Mount Schottky Barrier Diode

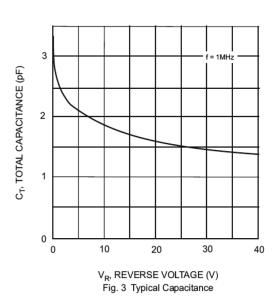


Characteristic	Symbol	Min.	Тур.	Max.	Unit
Reverse Recovery Time from I _F = 10mA through I _R = 10mA to I _R = 1mA	trr	-	-	5	ns
Thermal Resistance Junction to Ambient Air	RthJA	-	-	430	k/W
Capacitance at V _R = 0V, F = 1MHz	Ctot	-	-	2	pF

Typical Characteristics:

T_A = 25°C unless otherwise specified.





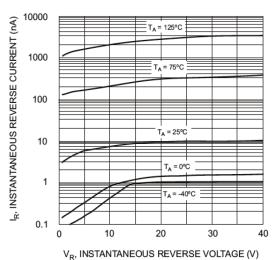
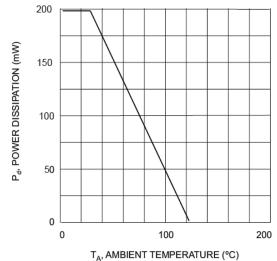


Fig. 2 Typical Reverse Characteristics



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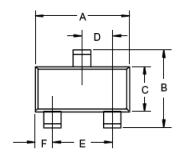


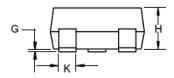
Fig. 4 Power Derating Curve, Total Package

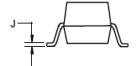
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Dimension:







SOT-23			
Dim.	Min.	Max.	
Α	2.8	3.04	
В	2.1	2.64	
С	1.2	1.4	
D	0.89	1.03	
E	1.78	2.05	
F	0.45	0.6	
G	0.013	0.1	
Н	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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