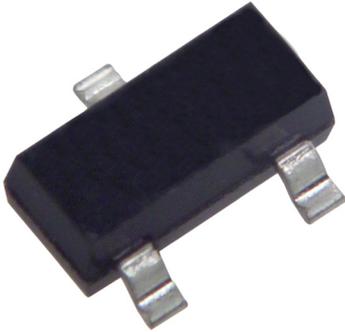
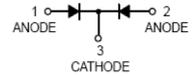


Surface Mount Schottky Barrier Diodes

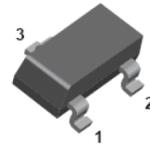
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BAS70



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:

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

Characteristic	Symbol	Limits	Unit
RMS reverse voltage	$V_{R(RMS)}$	49	V
Repetitive peak reverse voltage	V_{RRM}	70	V
Working peak reverse voltage	V_{RWM}		
Diode reverse voltage	V_R		
Forward continuous current	I_F	70	mA
Non-Repetitive peak forward surge current at $t_p < 1\text{s}$	I_{FSM}	100	mA
Power dissipation	P_D	200	mW
Thermal resistance, junction to ambient air	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Junction and storage temperature range	T_j, T_{stg}	-65 to +150	$^\circ\text{C}$

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
Element14.com/multicomp-pro

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Surface Mount Schottky Barrier Diodes

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Electrical Characteristics:

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

Characteristic	Symbol	Test conditions	Min.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_{(BR)} = 10\mu\text{A}$	70	-	V
Reverse leakage current	I_R	$t_P < 300\mu\text{s}, V_R = 50\text{V}$	-	100	nA
Forward voltage	V_F	$t_P < 300\mu\text{s}, I_F = 1\text{mA}$ $t_P < 300\mu\text{s}, I_F = 15\text{mA}$	-	410 1,000	mV
Junction capacitance	C_j	$V_R = 0\text{V}, f = 1\text{MHz}$	-	2	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 10\text{mA}$ to $I_R = 1\text{mA}, R_L = 100\Omega$	-	5	nS

Typical Characteristics:

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

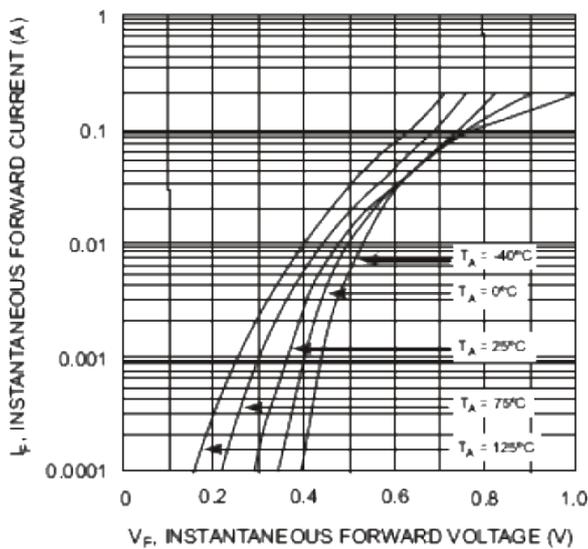


Fig. 1 Typical Forward Voltage

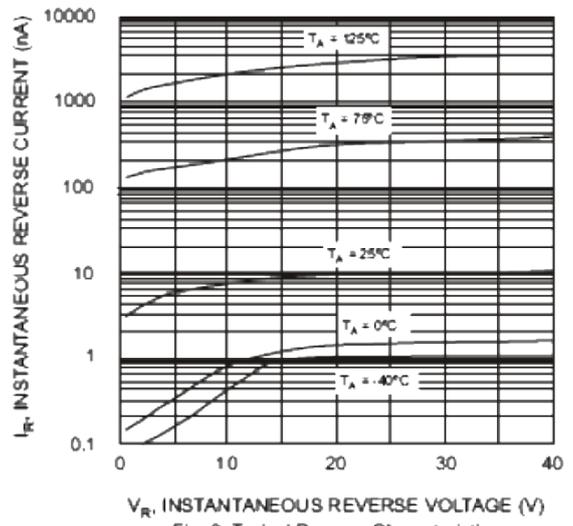
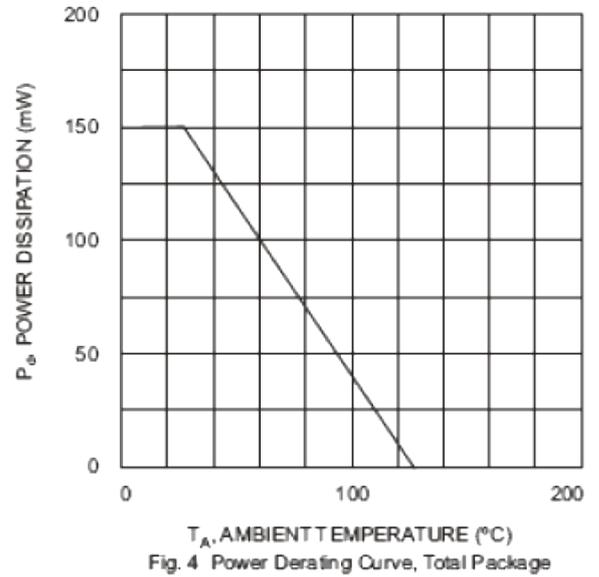
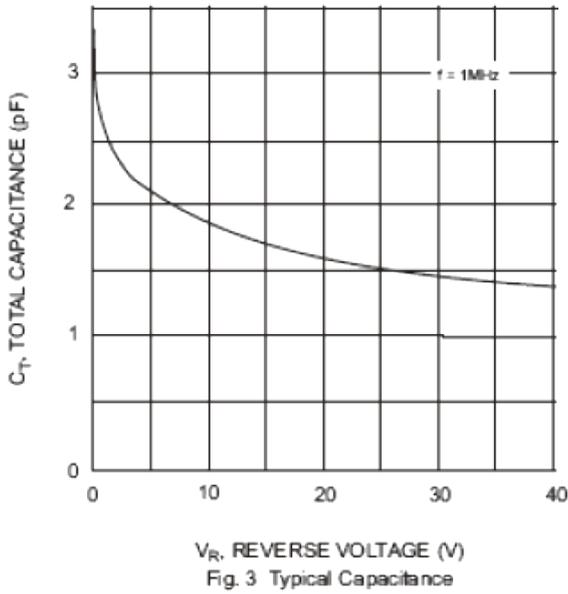


Fig. 2 Typical Reverse Characteristics

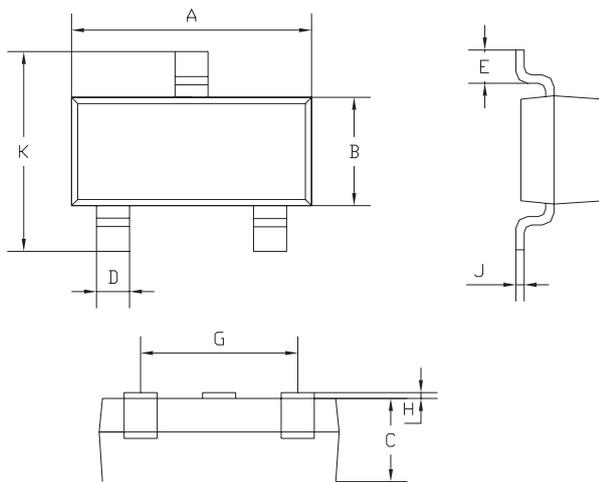
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Surface Mount Schottky Barrier Diodes



Package Outline:

Plastic surface mounted package

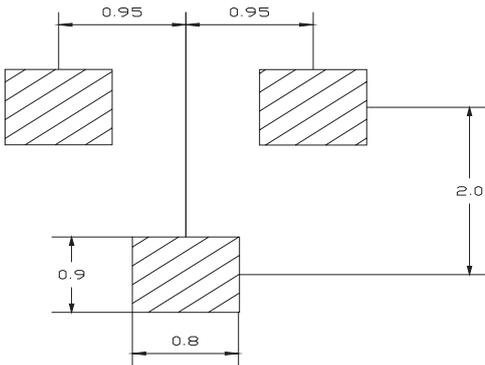


SOT-23		
Dim.	Min.	Max.
A	2.85	2.95
B	1.25	1.35
C	1 Typ.	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1 Typ.	
K	2.35	2.45

Dimensions : Millimetres

Surface Mount Schottky Barrier Diodes

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 Diodes	BAS70-05-7-F
	BAS70-7-F

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