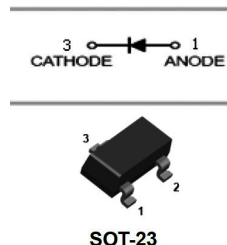


Surface Mount Switching Diode

multicompPRO

RoHS
Compliant



Features

- Fast switching speed.
- Surface mount package ideally suited for automatic insertion.
- For general purpose switching applications.
- High conductance.

Applications

High speed switching application.

Maximum Rating @ TA = 25°C unless otherwise specified

Characteristic	Symbol	BAS19	Unit
Peak Repetitive Reverse Voltage	VRRM	120	V
Working Peak Reverse Voltage DC Reverse Voltage	VRWM VR	100	V
RMS Reverse Voltage	VR(RMS)	71	V
Forward Continuous Current (max.)	IFM	400	mA
Average rectified output Current	IO	200	mA
Non-Repetitive Peak Forward Surge Current @t=1.0µs @t=1.0s	IFSM	2.5 0.5	A
Repetitive Peak Forward Surge Current	IFRM	625	A
Power Dissipation	PD	250	mW
Thermal Resistance Junction to Ambient Air	RθJA	500	°C/W
Operating Junction Temperature Range	Tj	150	°C
Storage Temperature Range	TSTG	-65 to +150	°C

Surface Mount Switching Diode **multicomp**PRO

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

Characteristic	Symbol	Min	Max.	Unit	Test Condition
Reverse breakdown voltage BAS19	$V_{(BR)R}$	100 150	-	V	$I_R = 100\mu\text{A}$
Forward Voltage	V_F	-	1 1.25	V	$I_F = 100\text{mA}$ $I_F = 200\text{mA}$
Reverse Leakage Current BAS19	I_R	-	100	nA	$V_R = 100\text{V}$ $V_R = 105\text{V}$
Junction Capacitance	C_j	-	5	pF	$V_R = 0\text{V}$, $f = 1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	-	50	ns	$I_F = I_R = 30\text{mA}$, $t_{rr} = 0.1 \times I_R$

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

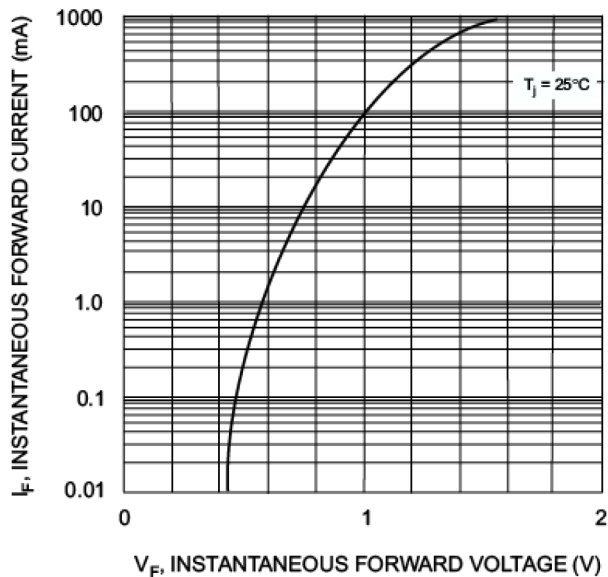


Fig. 1 Forward Characteristics

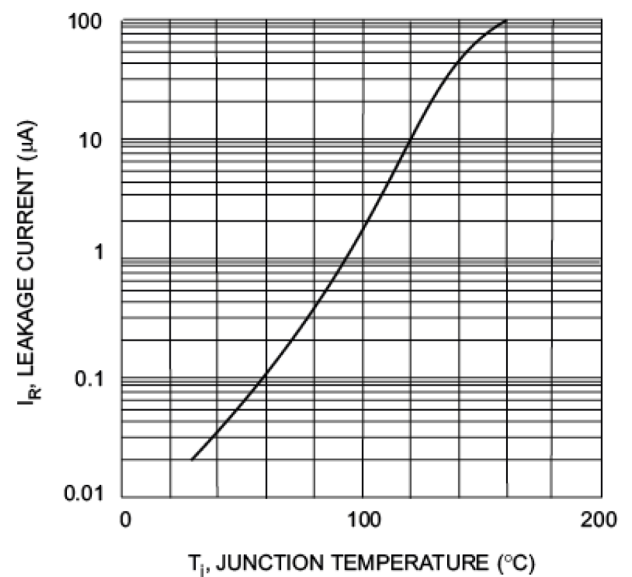
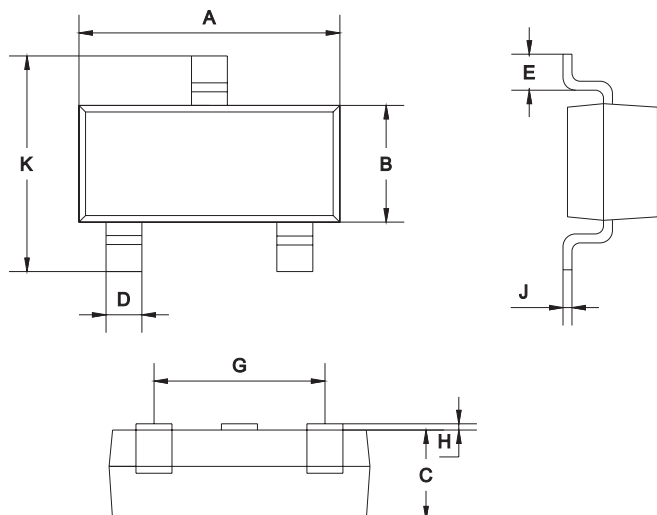


Fig. 2 Leakage Current vs Junction Temperature

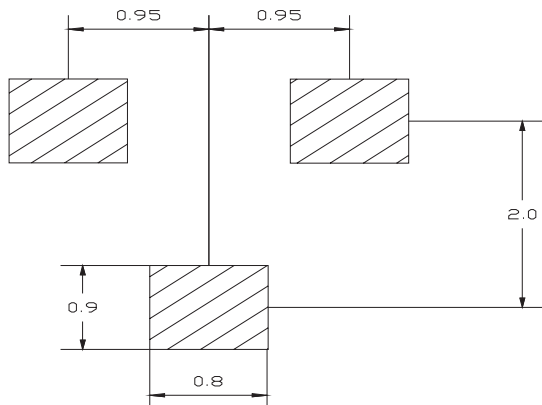
Package Outline

Plastic surface mounted package



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

Soldering Footprint



Part Number Table

Description	Part Number
Surface Mount Switching diode, 100V, 200mA, SOT-23	BAS19-7-F

Dimension : Millimetres

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