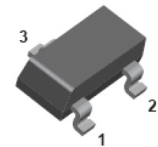
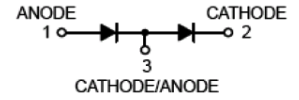


Surface Mount Switching Diode



Features:

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



SOT-23

Applications:

High speed switching application.

Max. Rating @ T_A = 25°C unless otherwise specified

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	250	V
Working Peak Reverse Voltage DC Reverse Voltage	V _{RWM} V _R	200	
RSM Reverse Voltage	V _{R(RMS)}	141	
Forward Continuous Current(Max.)	I _{FM}	400	mA
Peak Forward Surge Current	I _{FSM}	9	A
@t = 1μs		3	
@t = 1ms		1.7	
Repetitive Peak Forward Surge Current	I _{FRM}	625	mA
Power Dissipation	P _D	350	mW
Thermal Resistance Junction To Ambient Air	R _{θJA}	357	°C/W
Operating Junction Temperature Range	T _j	150	°C
Storage Temperature Range	T _{STG}	-65 to +150	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min.	Max.	Unit	Test Condition
Reverse breakdown Voltage	V _{(BR)R}	250	-	V	I _R = 100μA
Reverse Leakage Current	I _R	-	100	nA	V _R = 200V
Forward voltage	V _F	-	1 1.25	V	I _F = 100mA I _F = 200mA
Total Capacitance	C _T	-	5.0	pF	V _R = 0V, f = 1MHz
Reverse Recovery Time	t _{rr}	-	50	ns	I _F = I _R = 30mA I _{rr} = 0.1×I _R R _L = 100Ω

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

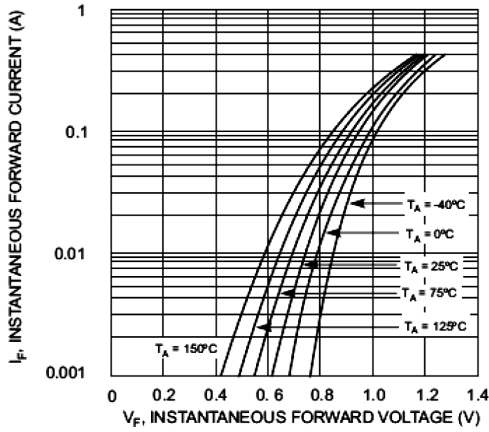


Fig. 1 Typical Forward Characteristics

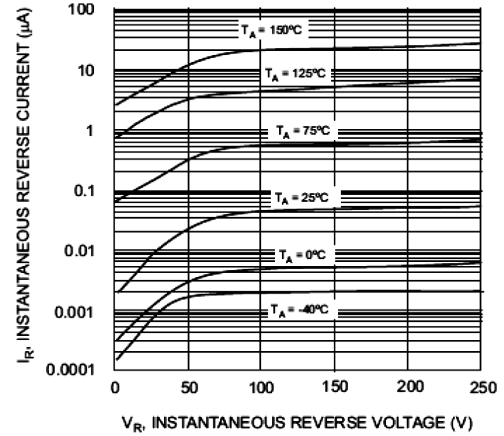


Fig. 2 Typical Reverse Characteristics

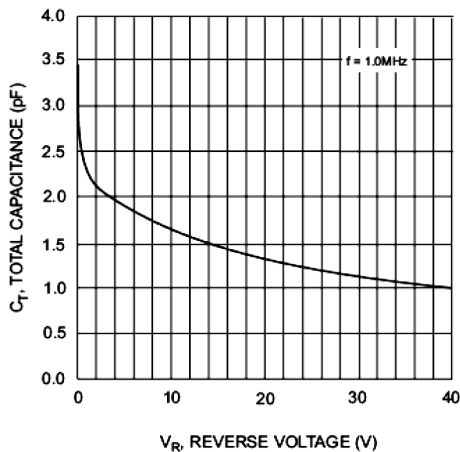


Fig. 3 Typical Capacitance vs. Reverse Voltage

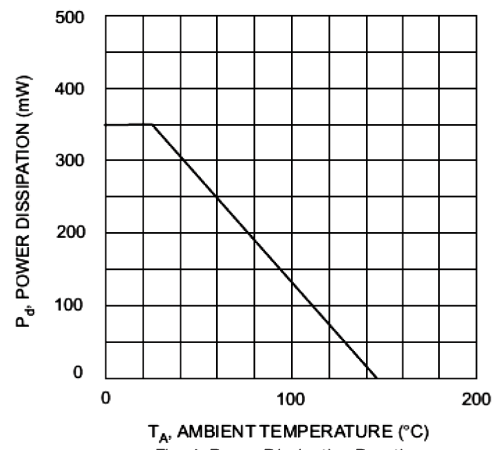
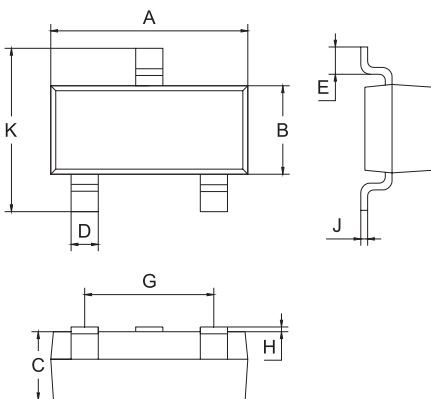


Fig. 4 Power Dissipation Derating

Plastic surface mounted package

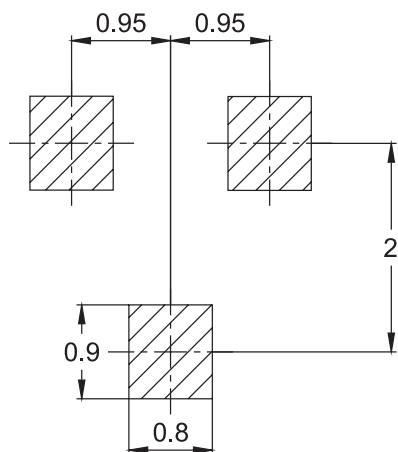


SOT-23		
Dim.	Min.	Max.
A	2.7	3.1
B	1.1	1.5
C	1 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.8	2
H	0.02	0.1
J	0.1 Typical	
K	2.2	2.6

Dimensions : Millimetres

Surface Mount Switching Diode

Soldering Footprint



Dimensions : Millimetres

Package Information

Part Number	Package	Shipping
BAV23S-7-F	SOT-23	3,000 / Tape & Reel

Part Number Table

Description	Part Number
Surface mount switching diode	BAV23S-7-F

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