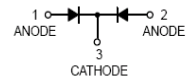
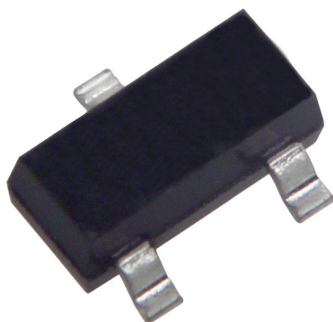
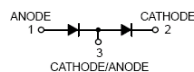


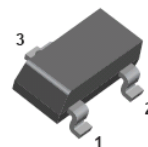
Surface Mount Switching Diode



BAV23C-7-F



BAV23S-7-F



SOT-23

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 Ratings:

Ratings at 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	V
RMS reverse voltage	$V_{R(RMS)}$	141	V
Forward continuous current (Max.)	I_{FM}	400	mA
Peak forward surge current at $t=1\mu s$ at $t=100\mu s$ at $t=10ms$	I_{FSM}	9 3 1.7	A
Repetitive peak forward surge current	I_{FRM}	625	mA
Power dissipation	P_D	350	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	357	°C/W
Operating and storage temperature range	T_j, T_{STG}	-65 to +150	°C

Surface Mount Switching Diode



Electrical Characteristics:

Ratings at 25°C unless otherwise specified

Parameter	Symbol	Test conditions	Min.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 100\mu A$	250	-	V
Reverse leakage current	I_R	$V_R = 200V$	-	100	nA
Forward voltage	V_F	$I_F = 100mA$ $I_F = 2000mA$	-	1 1.25	V
Total capacitance	C_T	$V_R = 0V$ $f = 1MHz$		5	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 30mA$ $I_{rr} = 0.1 \times I_R$ $R_L = 100\Omega$	-	50	nS

Typical Characteristics:

$T_A = 25^\circ C$ unless otherwise specified

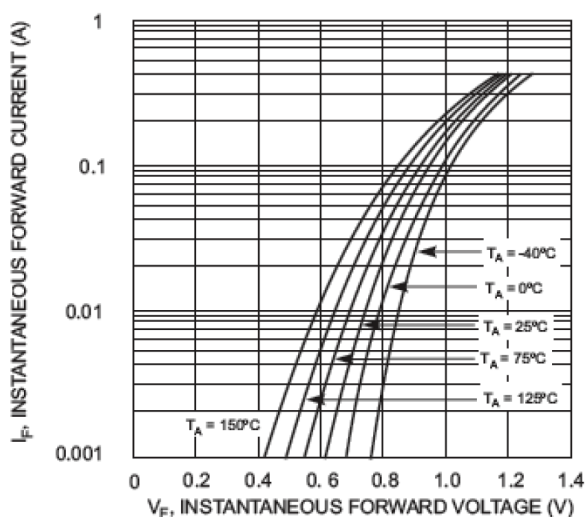


Fig. 1 Typical Forward Characteristics

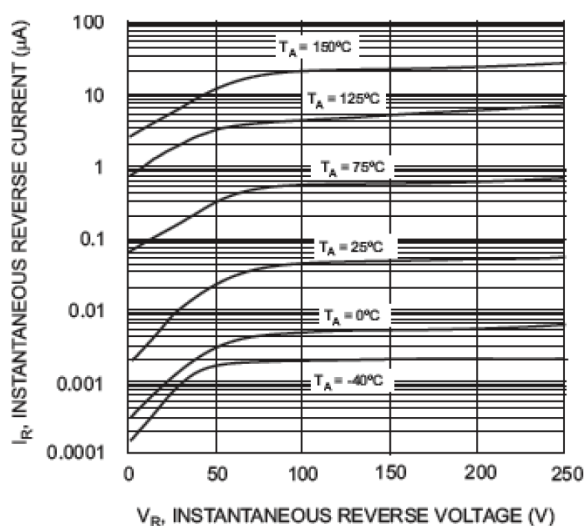


Fig. 2 Typical Reverse Characteristics

Surface Mount Switching Diode

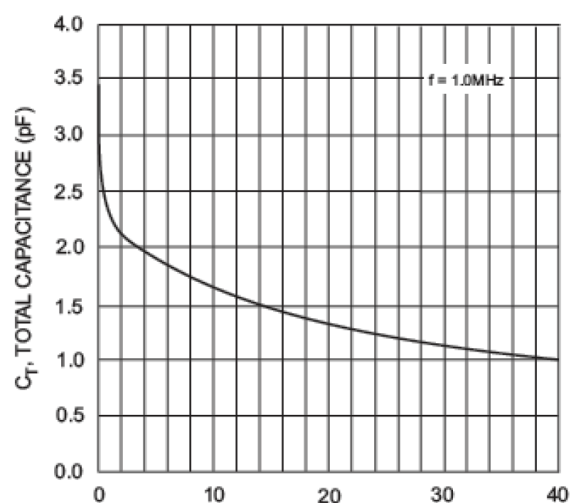


Fig. 3 Typical Capacitance vs. Reverse Voltage

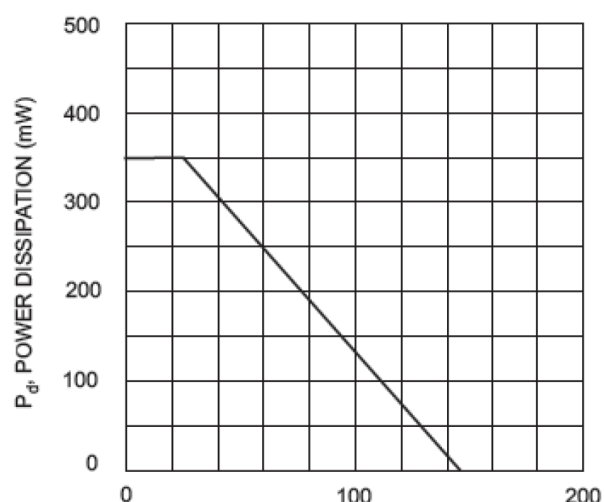
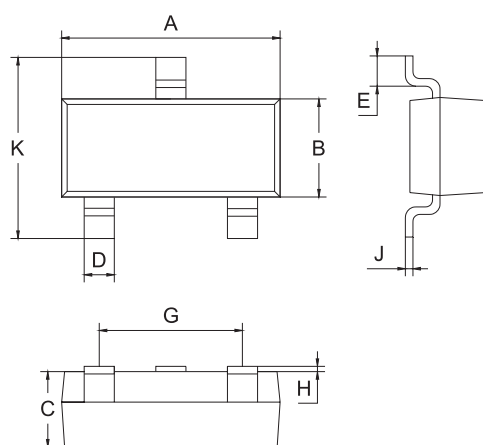


Fig. 4 Power Dissipation Derating

Package Outline:

Plastic surface mounted package



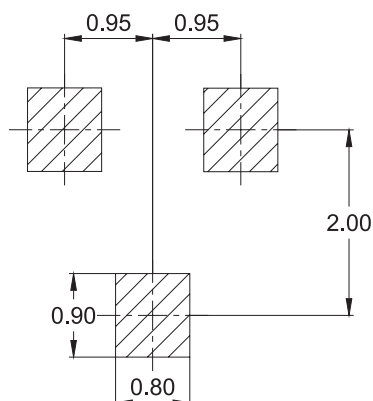
SOT-23		
Dim.	Min.	Max.
A	2.7	3.1
B	1.1	1.5
C	1 Typ.	
D	0.4 Typ.	
E	0.35	0.48
G	1.8	2
H	0.02	0.1
J	0.1 Typ.	
K	2.2	2.6

Dimensions : Millimetres

Surface Mount Switching Diode



Soldering Footprint:



Dimensions : Millimetres

Package Information:

Device	Package	Shipping
BAV23C-7-F & BAV23S-7-F	SOT-23	3,000 / Tape & Reel

Part Number Table

Description	Part Number
Surface Mount Switching Diode	BAV23C-7-F
	BAV23S-7-F

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