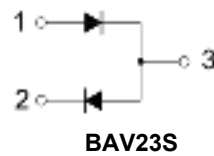
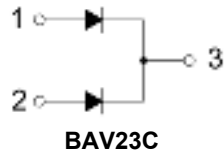
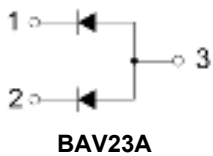


BAV23x Series Switching Diodes

Features

- Fast switching speed
- High conductance
- For general purpose switching applications

Configurations



SOT-23

Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Repetitive Reverse Voltage	V _{RRM}	250	V
Working Peak Reverse Voltage	V _{RWM}	175	V
Reverse Voltage	V _R		
Average Rectified Output Current	I _O	225	mA
Non-Repetitive Peak Forward Surge Current	I _{FSM}	1.7	A
Power Dissipation	P _D	350	mW
Thermal Resistance, Junction-to-Ambient	R _{θJA}	357	°C/W
Operating Junction Temperature Range	T _J	-55 To +150	°C
Storage Temperature Range	T _{STG}	-55 To +150	°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse Breakdown Voltage	V _{BR}	I _R =100μA	250	-	V
Forward Voltage	V _F	I _F =100mA	-	1	V
		I _F =200mA	-	1.25	
Reverse Current	I _R	V _R =250V	-	0.1	μA
Total Capacitance	C _{tot}	V _R =0, f=1MHz	-	5	pF
Reverse Recovery Time	t _{rr}	I _F =I _R =30mA, R _L =100Ω, I _{RR} =0.1×I _R	-	50	nS

Typical Electrical Characteristic Curves

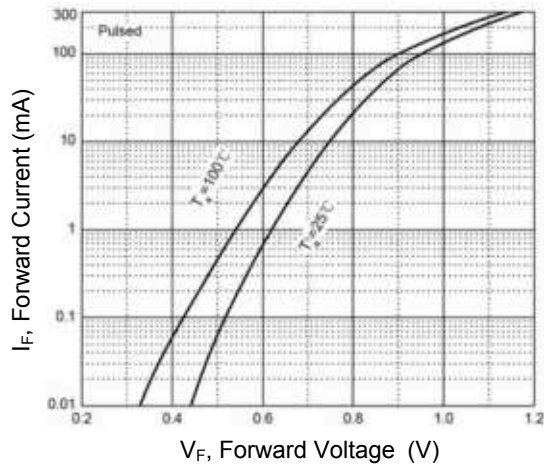


Figure 1. Forward Characteristics

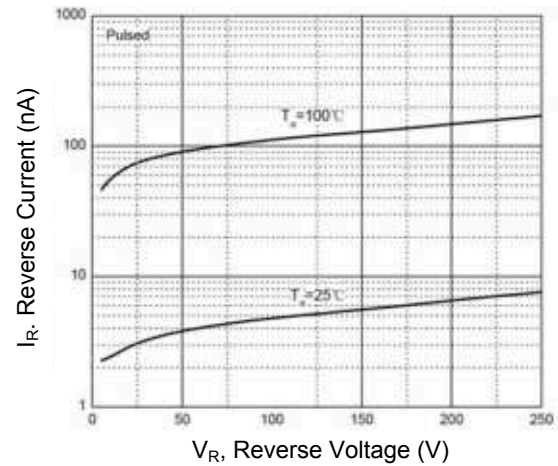


Figure 2. Reverse Characteristics

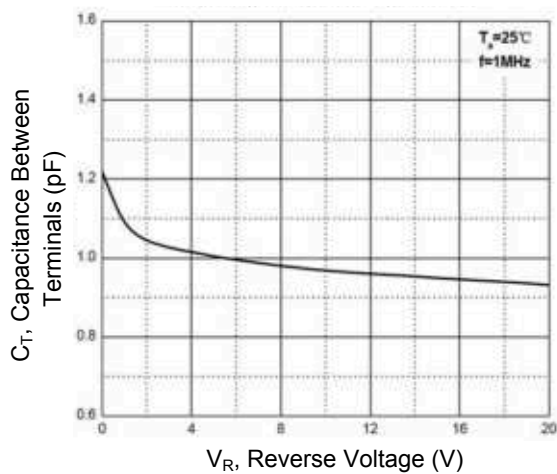


Figure 3. Capacitance Characteristics

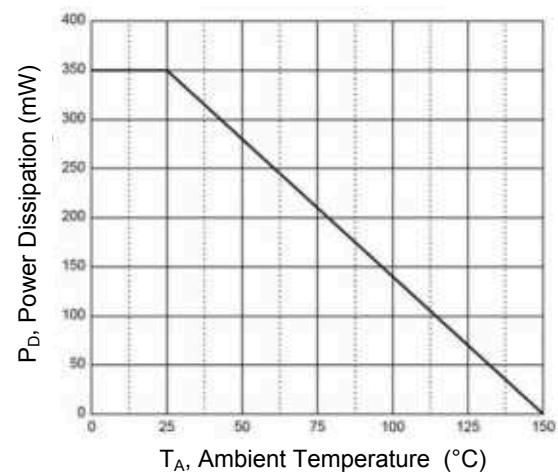
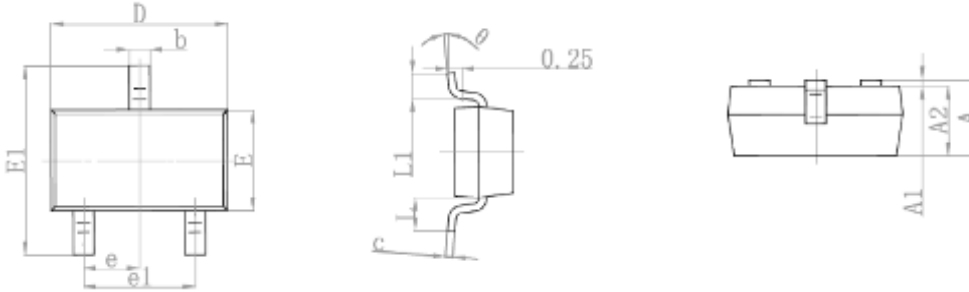


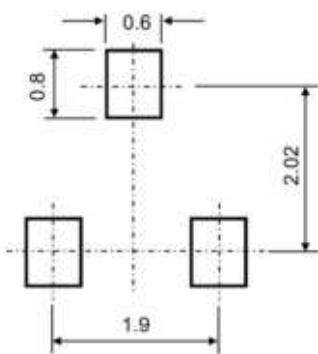
Figure 4. Power Derating Curve

Package Outline Dimensions (SOT-23)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

Recommended Pad Layout



Note:

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only

Order Information

Device	Package	Marking	Packaging	SPQ
BAV23A	SOT-23	KT7	Tape & Reel	3,000pcs / Reel
BAV23C	SOT-23	KT6	Tape & Reel	3,000pcs / Reel
BAV23S	SOT-23	KL31	Tape & Reel	3,000pcs / Reel

For more information, please contact us at: inquiry@goodarksemi.com