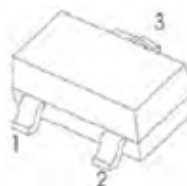




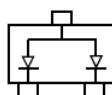
SOT-23



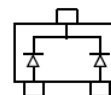
Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- Pb-Free package is available
- Moisture Sensitivity Level 1

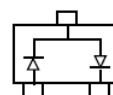
Marking information



BAW56 Marking: A1



BAV70 Marking: A4



BAV99 Marking: A7

Ordering Information

Part No.	Remark	Package	Packing
BAV70、BAV99、BAW56	General	SOT-23	3000 / Tape & Reel
BAV70-H、BAV99-H、BAW56-H	Halogen Free		
BAV70-Q、BAV99-Q、BAW56-Q	AEC-Q101 qualified		

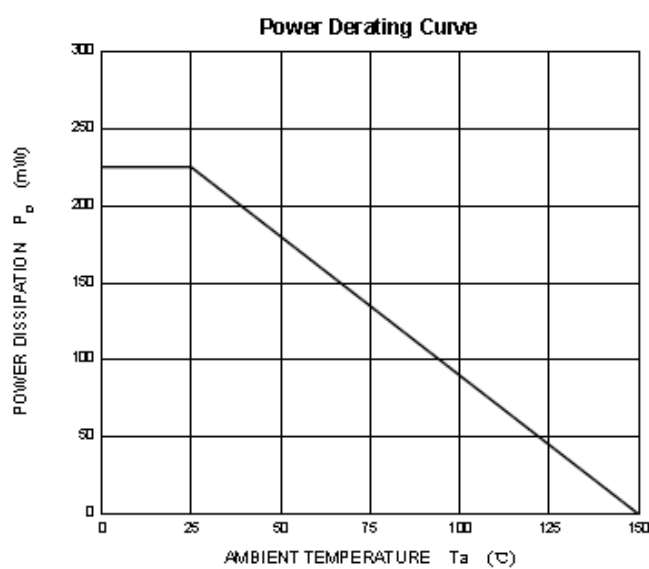
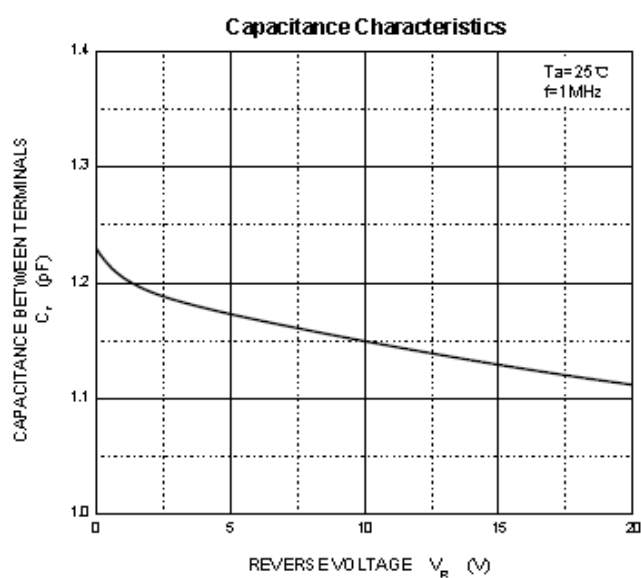
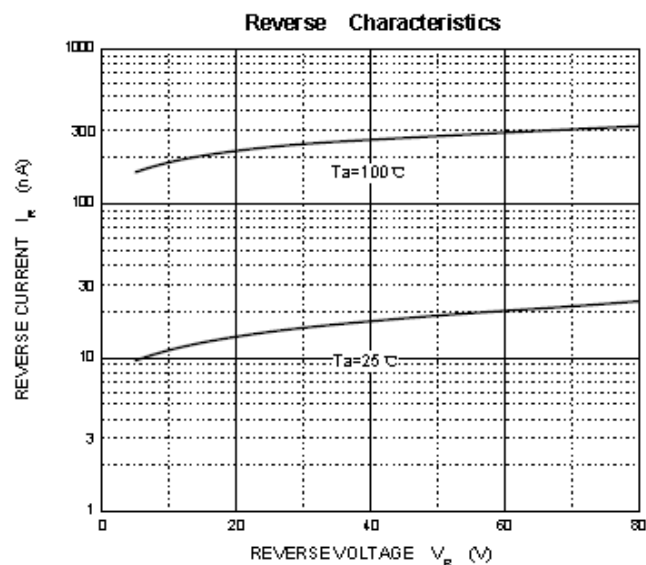
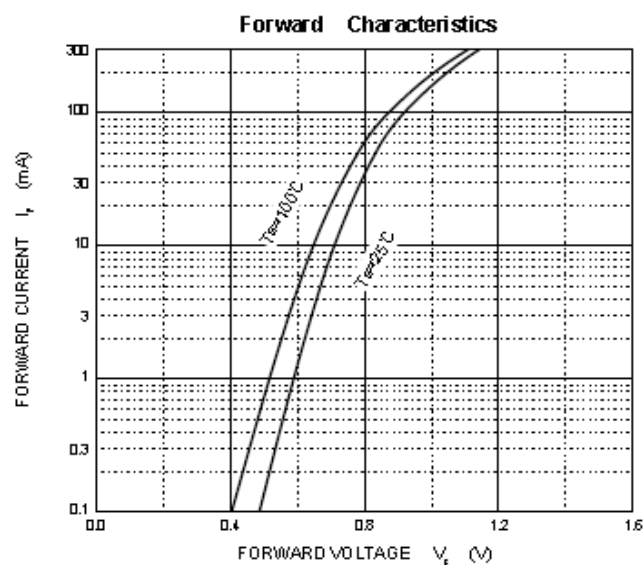
Maximum Ratings (T_a=25°C unless otherwise noted)

Parameter	Symbol	Limit	Unit
Reverse Voltage	V _R	70	V
Forward Current	I _F	200	mA
Peak Forward Surge Current	I _{FM(surge)}	500	mA
Power Dissipation	P _D	225	mW
Thermal Resistance From Junction To Ambient	R _{θJA}	556	°C/W
Junction Temperature	T _J	150	°C
Operating/ Storage Temperature	T _{STG}	-55~+150	°C

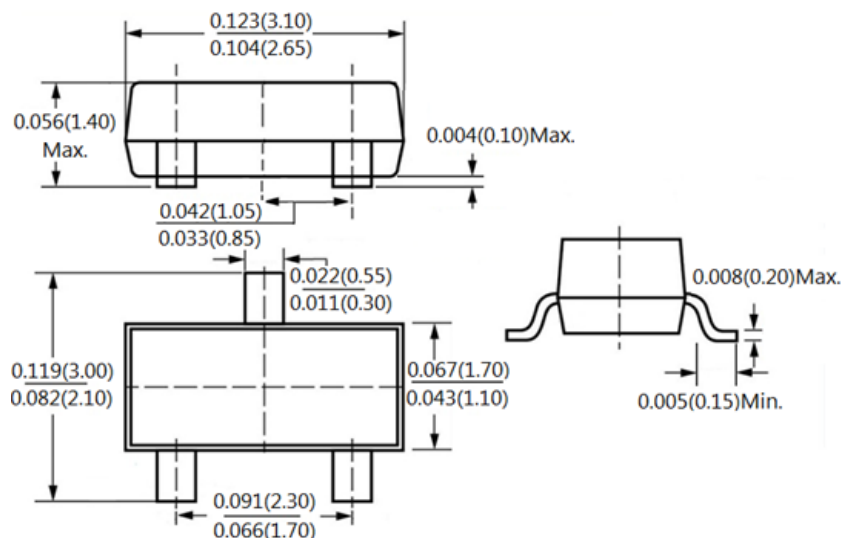
Electrical Characteristics (T_a=25°C unless otherwise noted)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V _R	I _R =100μA	70	—	—	V
Reverse Voltage Leakage Current	I _R	V _R =70V	—	—	2.5	μA
Forward Voltage	V _{F1}	I _F =1mA	—	—	0.715	V
	V _{F2}	I _F =10mA	—	—	0.855	
	V _{F3}	I _F =50mA	—	—	1	
	V _{F4}	I _F =150mA	—	—	1.25	
Total Capacitance	C _T	V _R =0V, f=1MHz	—	—	1.5	pF
Reverse Recovery Time	t _{rr}	I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100Ω	—	—	6	ns

Typical Characteristics



Package Outline Dimensions

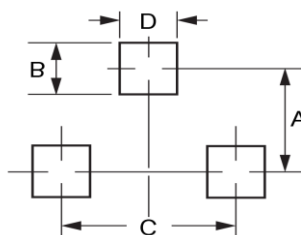


SOT-23

Dimensions in inches and (millimeters)

Suggested Pad Layout

Symbol	Outline	SOT-23 millimeters
A		2.02
B		0.80
C		1.90
D		0.60



Tape & Reel Specification

Item	Symbol	Dimension(mm)
Carrier width	A	3.15 ±0.1
Carrier length	B	2.77 ±0.1
Carrier depth	C	1.22 ±0.1
Sprocket hole	d	1.50 ±0.10
Reel outside diameter	D	178 ±2
Reel inner diameter	D1	54.4 ±1
Feed hole width	D2	13.0 ±1
Sprocket hole position	E	1.75 ±0.1
Punch hole position	F	3.50 ±0.1
Punch hole pitch	P	4.0 ±0.1
Sprocket hole pitch	P0	4.0 ±0.1
Embossment center	P1	2.0 ±0.1
Tape width	W	9.5 ±1
Reel width	W1	12.3 ±1

