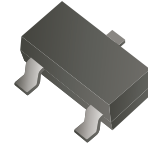


## ABAV23A/C/S-HF

RoHS Device  
Halogen Free



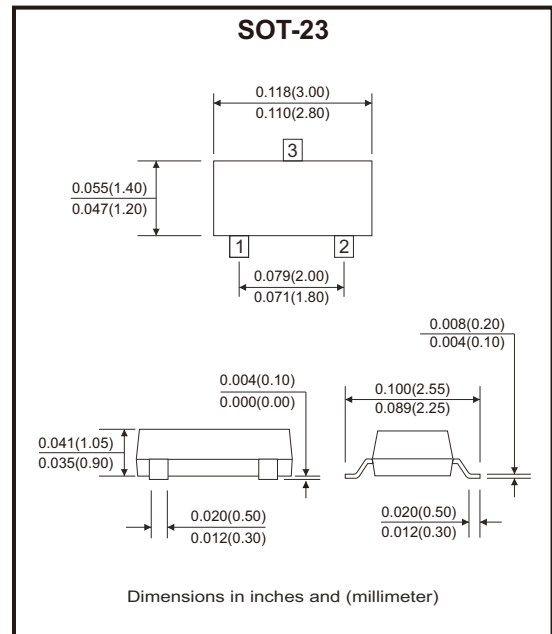
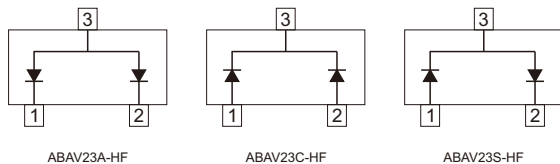
### Features

- Epoxy meets UL-94 V-0 flammability rating.
- Moisture sensitivity Level 1.
- Fast switching speed.
- High conductance.
- AEC-Q101 Qualified.

### Mechanical data

- Case: SOT-23, molded plastic.
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102.

### Circuit Diagram



### Maximum Rating (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>	250	V
Forward continuous current, per leg (Note 1)	I <sub>F</sub>	225	mA
Non-repetitive peak forward surge current @ t <sub>p</sub> =10ms	I <sub>FSM</sub>	1.7	A
Power dissipation (Note 1)	P <sub>D</sub>	350	mW
Thermal resistance from junction to ambient	R <sub>θJA</sub>	357	°C/W
Operation junction temperature range	T <sub>J</sub>	-55 to +150	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C

Notes: 1. Single diode loaded.

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REV:A

## Electrical Characteristics (at Ta=25°C unless otherwise noted, per leg)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{BR}$	$I_R = 100\mu A$	250			V
Forward voltage	$V_F$	$I_{FM} = 100mA, T_J = 25^\circ C$ $I_{FM} = 200mA, T_J = 25^\circ C$			1 1.25	V
Reverse current	$I_R$	$V_R = 200V$			0.1	$\mu A$
Total capacitance	$C_{tot}$	$V_R = 0V, f = 1MHz$			5	pF
Reverse recovery time	$t_{rr}$	$I_F = I_R = 30mA, V_R = 6V, R_L = 100\Omega$ $I_{rr} = 3mA$			50	nS

## Rating and Characteristic Curves (ABAV23A/C/S-HF)

Fig.1 -  $P_D$  —  $T_A$

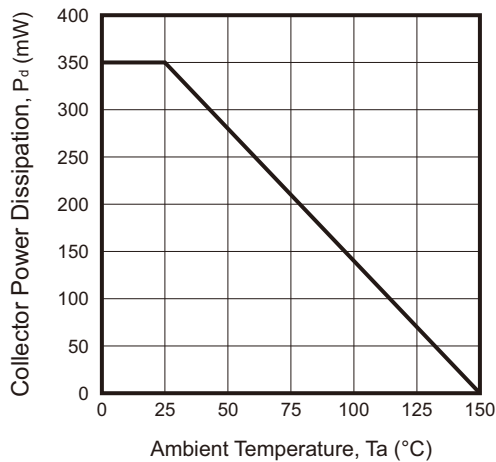


Fig.2 - Capacitance Characteristics

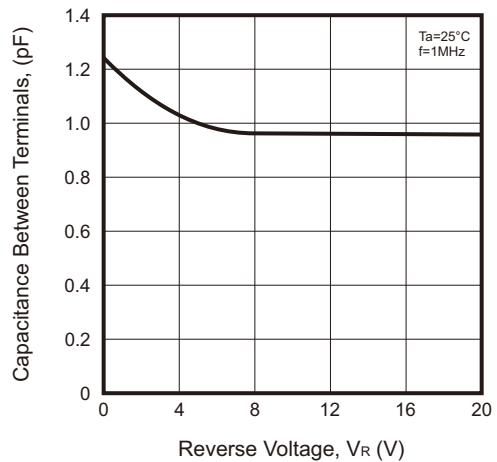


Fig.3 - Forward Characteristics

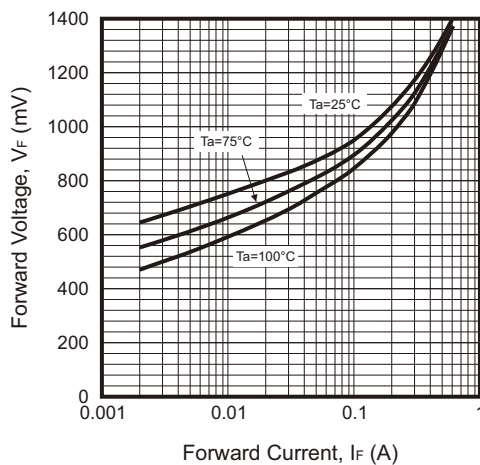
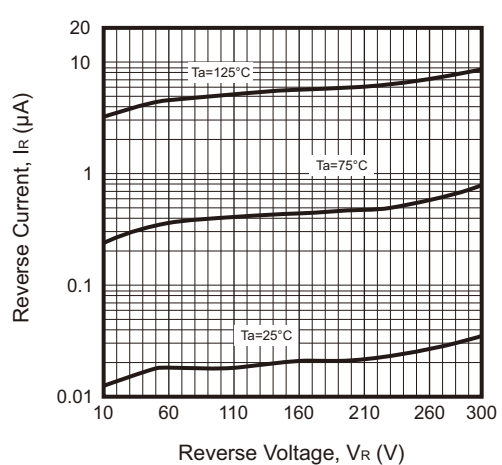


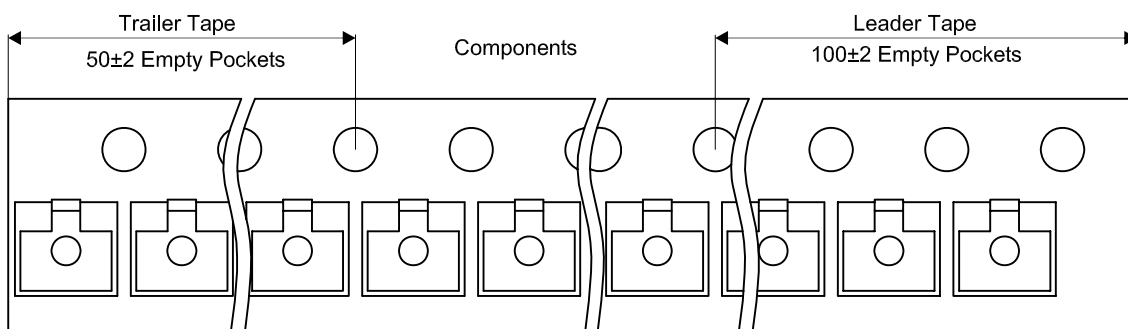
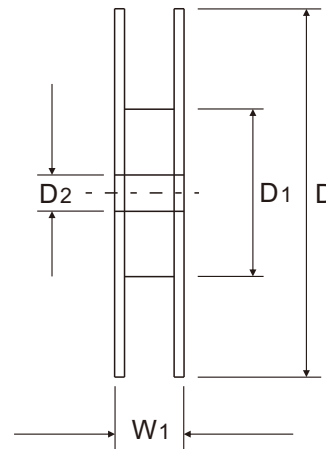
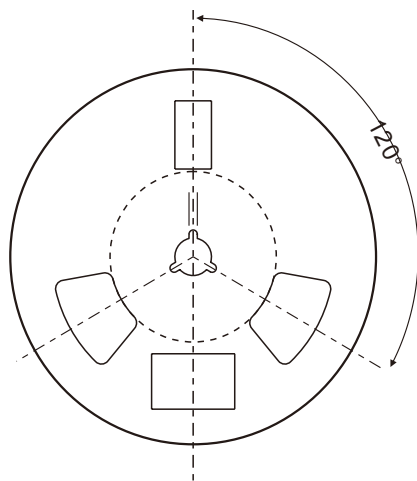
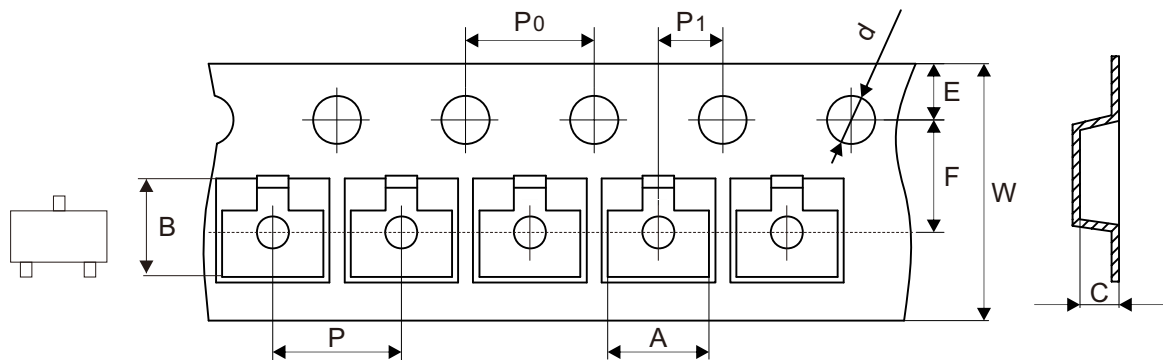
Fig.4 - Reverse Characteristics



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## Reel Taping Specification



SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 + 0.10 - 0.00	178.00 ± 1.00	54.60 ± 1.00	13.30 ± 1.00
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 + 0.004 - 0.000	7.008 ± 0.039	2.150 ± 0.039	0.524 ± 0.039

SOT-23	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 + 0.30 - 0.10	11.10 ± 0.20
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.315 + 0.012 - 0.004	0.437 ± 0.008

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REV:A