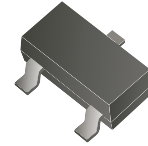


ABAV23A/C/S-HF

RoHS Device
Halogen Free



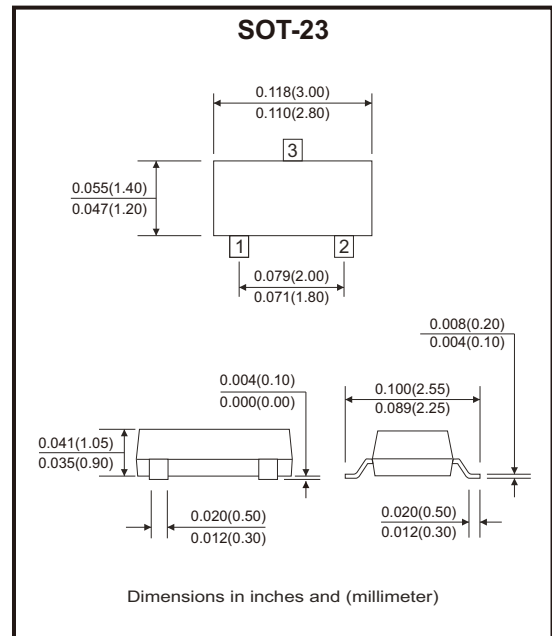
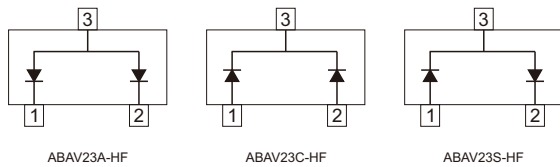
Features

- 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 _{RRM}	250	V
Forward continuous current, per leg (Note 1)	I _F	225	mA
Non-repetitive peak forward surge current @ t _p = 10ms	I _{FSM}	1.7	A
Power dissipation (Note 1)	P _D	350	mW
Thermal resistance from junction to ambient	R _{θJA}	357	°C/W
Operation junction temperature range	T _J	-55 to +150	°C
Storage temperature range	T _{STG}	-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	μA
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

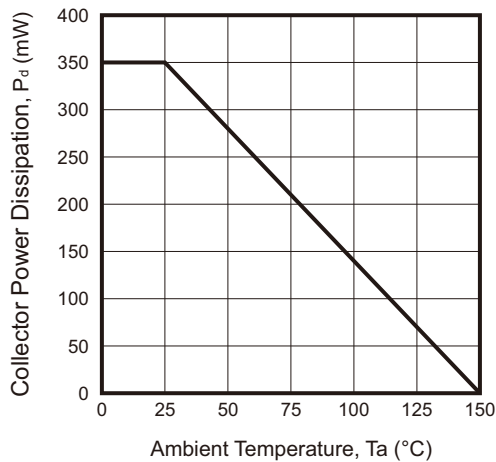


Fig.2 - Capacitance Characteristics

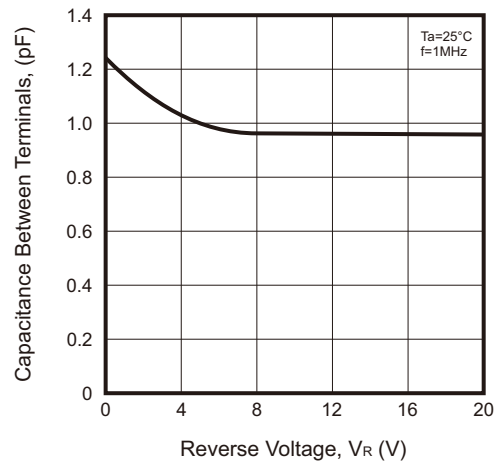


Fig.3 - Forward Characteristics

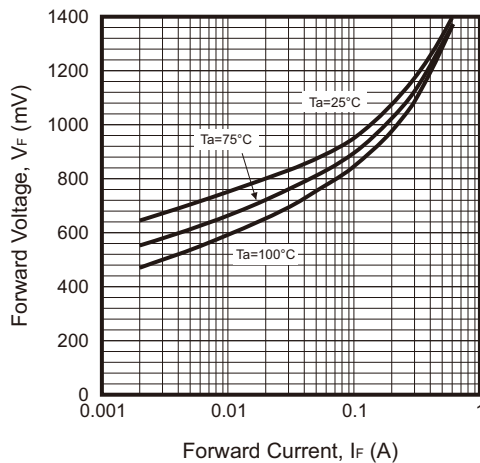
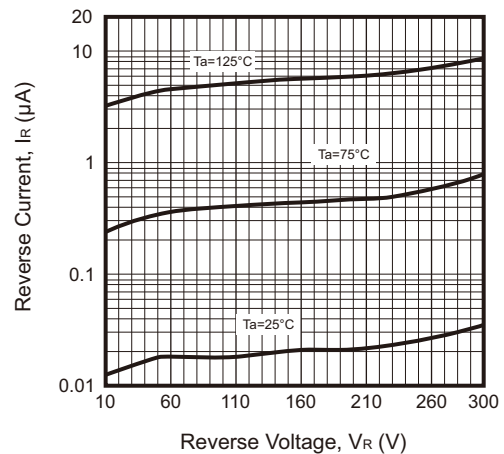


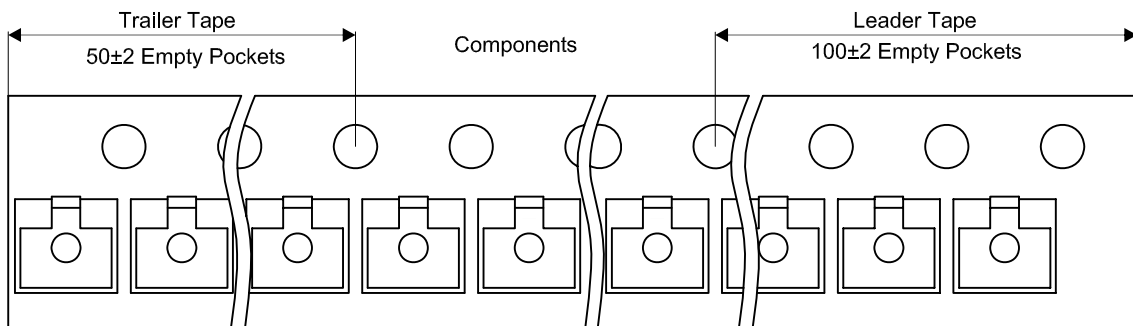
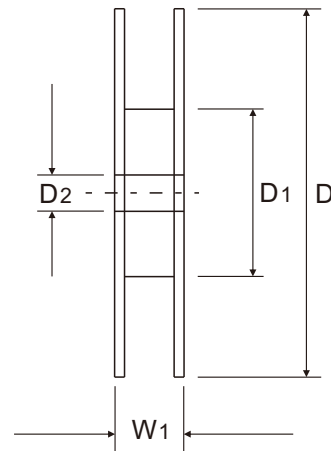
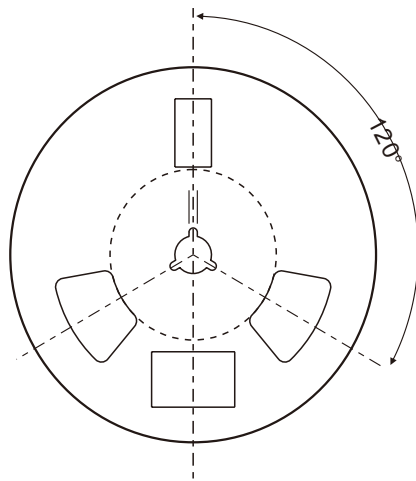
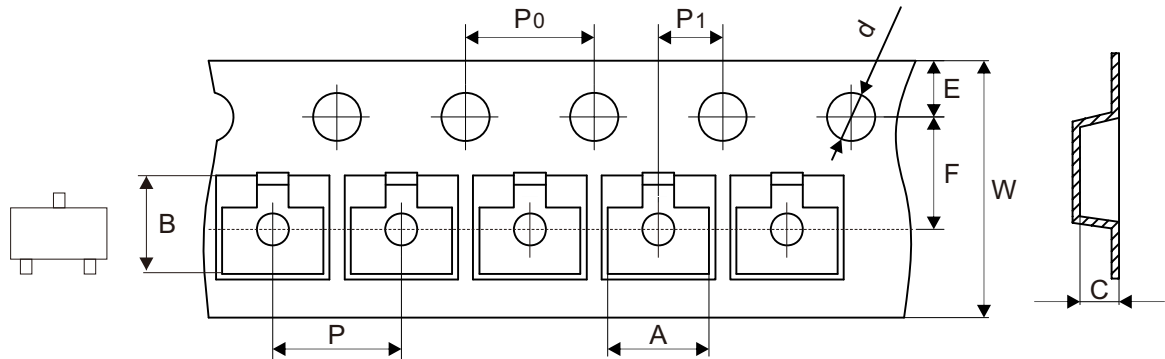
Fig.4 - Reverse Characteristics



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REV:A

Reel Taping Specification



SOT-23	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(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

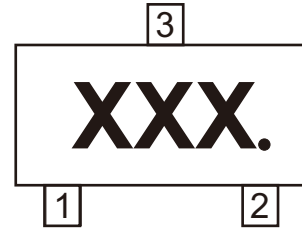
SOT-23	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 + 0.30 - 0.10	11.10 ± 0.20
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.315 + 0.012 - 0.004	0.437 ± 0.008

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REV:A

Marking Code

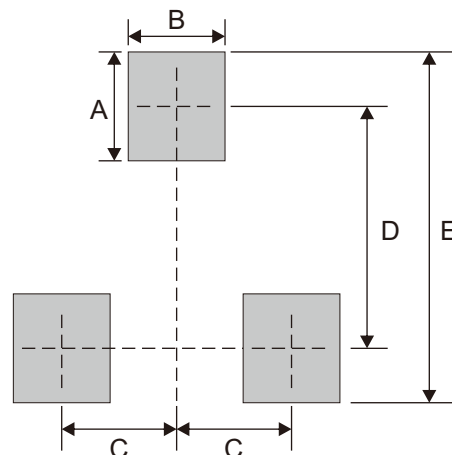
Part Number	Marking Code
ABAV23A-HF	KT7.
ABAV23C-HF	KT6.
ABAV23S-HF	KL31.



xxx/xxxx = Product type marking code

Suggested PAD Layout

SIZE	SOT-23	
	(mm)	(inch)
A	0.90	0.035
B	0.80	0.031
C	0.95	0.037
D	2.00	0.079
E	2.90	0.114



Note: 1. The pad layout is for reference purposes only.

Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-23	3,000	7