

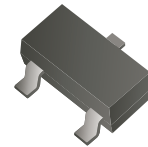
## ABAS16-HF

Reverse Voltage: 75 Volts

Forward Current: 150 mA

RoHS Device

Halogen Free



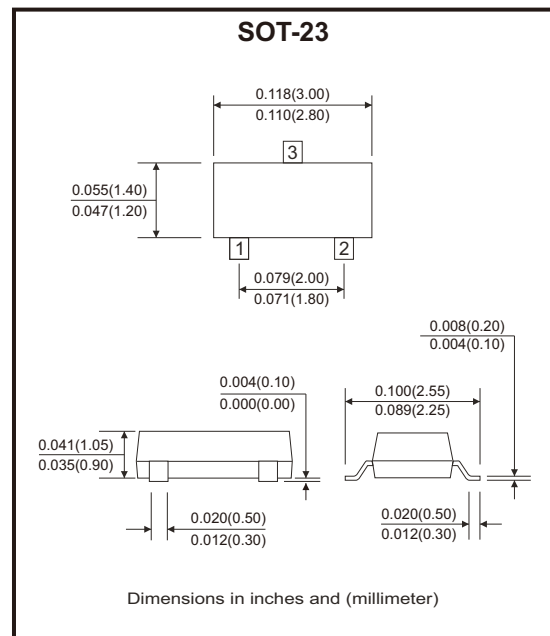
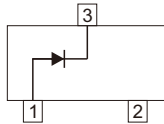
### Features

- Epoxy meets UL-94 V-0 flammability rating.
- Moisture sensitivity Level 1.
- 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
Reverse voltage	V <sub>R</sub>	75	V
Repetitive peak reverse voltage	V <sub>RRM</sub>	100	V
Average forward current	I <sub>FAV</sub>	150	mA
Repetitive peak forward current	I <sub>FRM</sub>	300	mA
Peak forward surge current	I <sub>FSM</sub>	2 1	A
		Pulse width =1μs Pulse width =1s	
Power dissipation	P <sub>tot</sub>	350	mW
Thermal resistance junction to ambient	R <sub>θJA</sub>	357	K/W
Maximum junction temperature range	T <sub>J</sub>	-55 to +150	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C

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

Parameter	Symbol	Conditions	Value	Unit
Forward voltage	V <sub>F1</sub>	I <sub>F</sub> =1mA	0.715	V
	V <sub>F2</sub>	I <sub>F</sub> =10mA	0.855	
	V <sub>F3</sub>	I <sub>F</sub> =50mA	1.0	
	V <sub>F4</sub>	I <sub>F</sub> =150mA	1.25	
Reverse current	I <sub>R</sub>	V <sub>R</sub> =75V	1.0	μA
Breakdown voltage	V <sub>R</sub>	I <sub>R</sub> =10μA	75	V
Diode capacitance	C <sub>D</sub>	V <sub>R</sub> =V <sub>F</sub> =0V, f=1MHz	4	pF
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =10mA, I <sub>rr</sub> =0.1I <sub>R</sub> , R <sub>L</sub> =100Ω	4	nS

## Rating and Characteristic Curves (ABAS16-HF)

Fig.1 - P<sub>D</sub> — T<sub>A</sub>

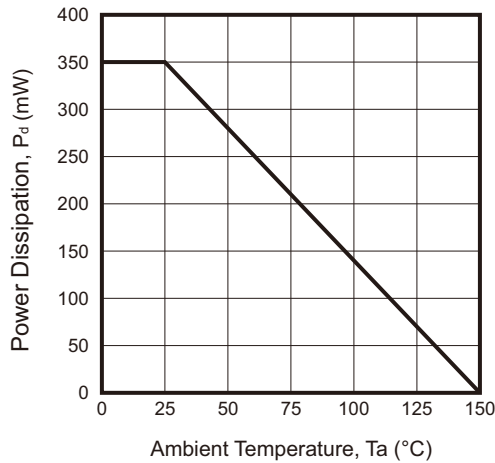


Fig.2 - C<sub>d</sub> — V<sub>R</sub>

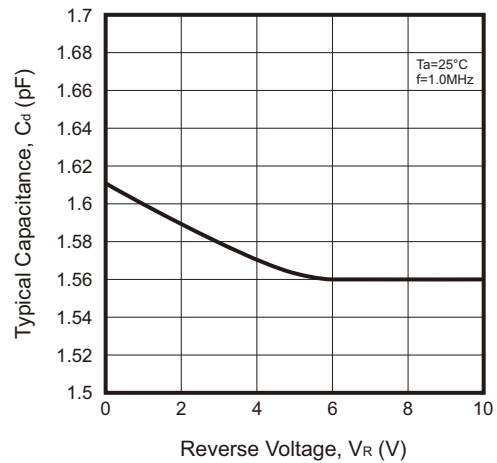


Fig.3 - Forward Characteristics

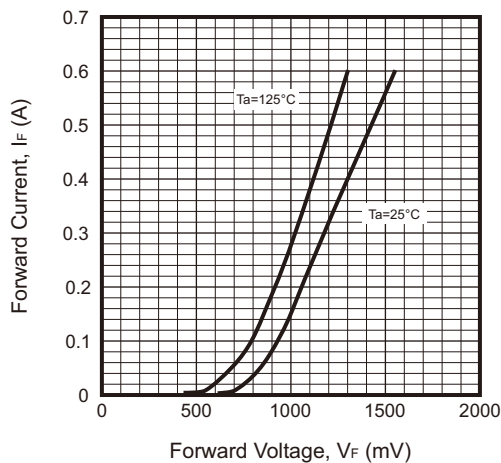
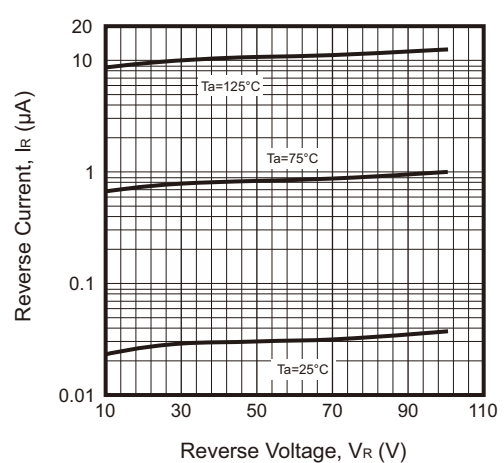


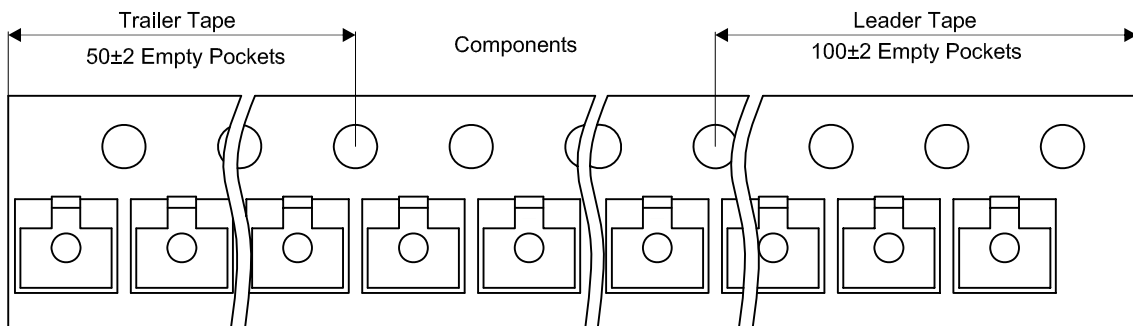
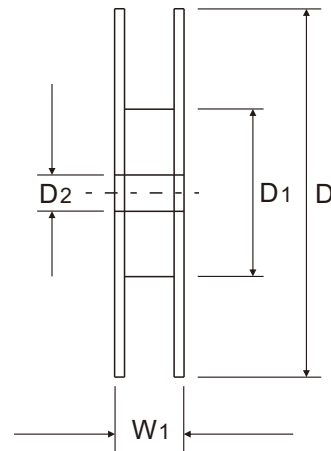
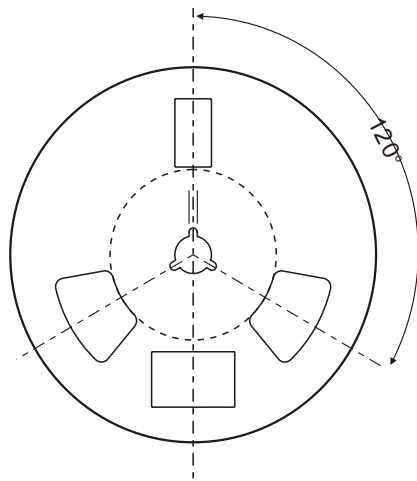
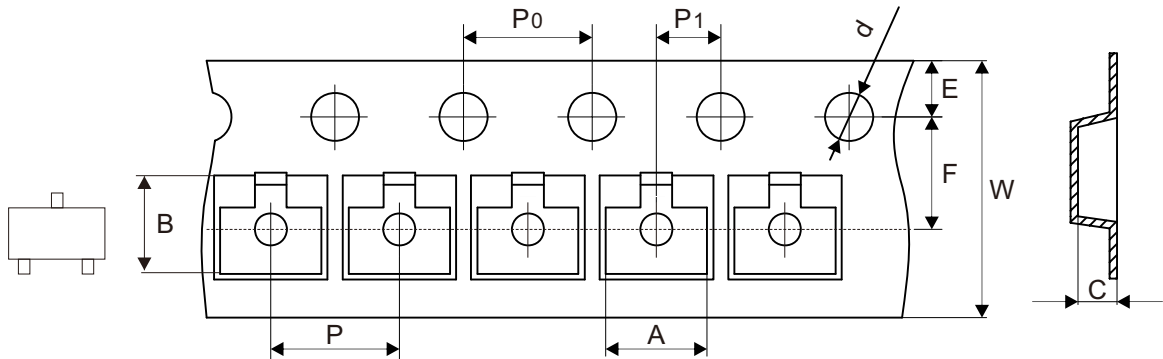
Fig.4 - Reverse Characteristics



Company reserves the right to improve product design, functions and reliability without notice.

REV:A

## 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

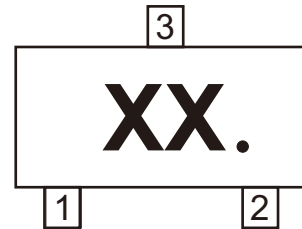
SOT-23	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 + 0.30 - 0.10	11.10 ± 0.20
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.315 + 0.012 - 0.004	0.437 ± 0.008

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REV:A

## Marking Code

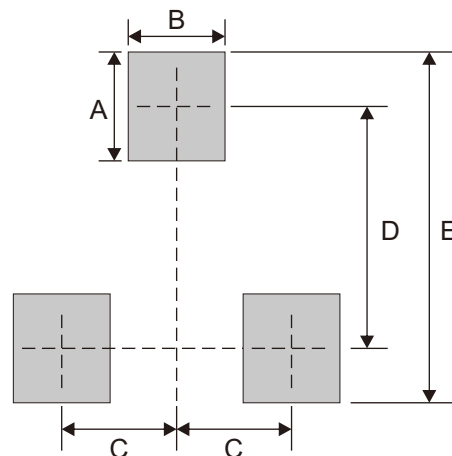
Part Number	Marking Code
ABAS16-HF	A6.



xx = 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