

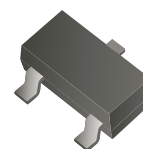
ABAS16-HF

Reverse Voltage: 75 Volts

Forward Current: 150 mA

RoHS Device

Halogen Free



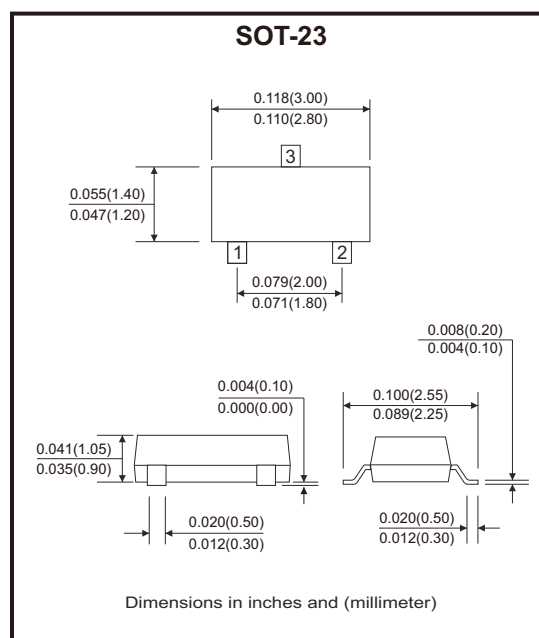
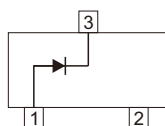
Features

- 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 _R	75	V
Repetitive peak reverse voltage	V _{RRM}	100	V
Average forward current	I _{FAV}	150	mA
Repetitive peak forward current	I _{FRM}	300	mA
Peak forward surge current	I _{FSM}	2 1	A
Pulse width =1μs Pulse width =1s			
Power dissipation	P _{tot}	350	mW
Thermal resistance junction to ambient	R _{θJA}	357	K/W
Maximum junction temperature range	T _J	-55 to +150	°C
Storage temperature range	T _{STG}	-55 to +150	°C

Electrical Characteristics (at $T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Conditions	Value	Unit
Forward voltage	V_{F1}	$I_F=1\text{mA}$	0.715	V
	V_{F2}	$I_F=10\text{mA}$	0.855	
	V_{F3}	$I_F=50\text{mA}$	1.0	
	V_{F4}	$I_F=150\text{mA}$	1.25	
Reverse current	I_R	$V_R=75\text{V}$	1.0	μA
Breakdown voltage	V_R	$I_R=10\mu\text{A}$	75	V
Diode capacitance	C_D	$V_R=V_F=0\text{V}$, $f=1\text{MHz}$	4	pF
Reverse recovery time	t_{rr}	$I_F=10\text{mA}$, $I_{rr}=0.1I_R$, $R_L=100\Omega$	4	nS

Rating and Characteristic Curves (ABAS16-HF)

Fig.1 - P_D — T_a

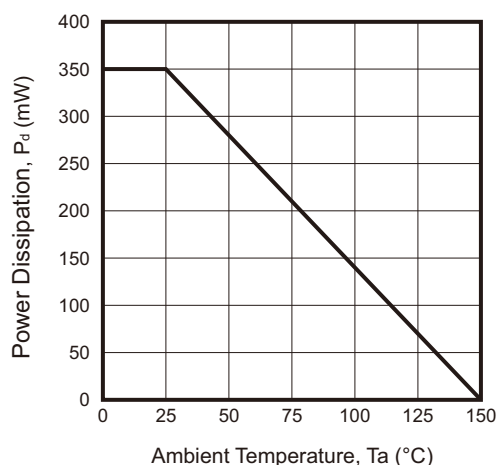


Fig.2 - C_d — V_R

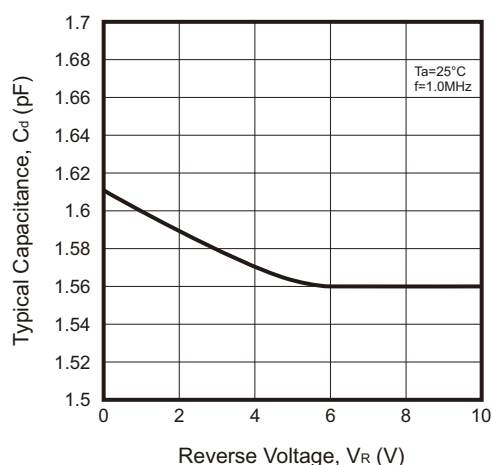


Fig.3 - Forward Characteristics

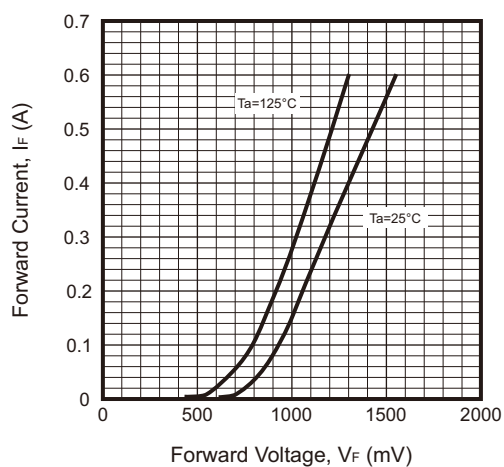
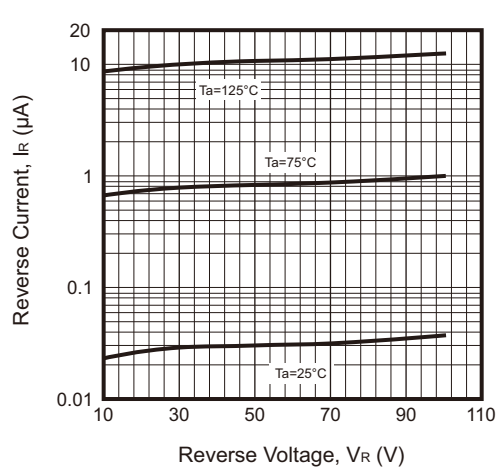


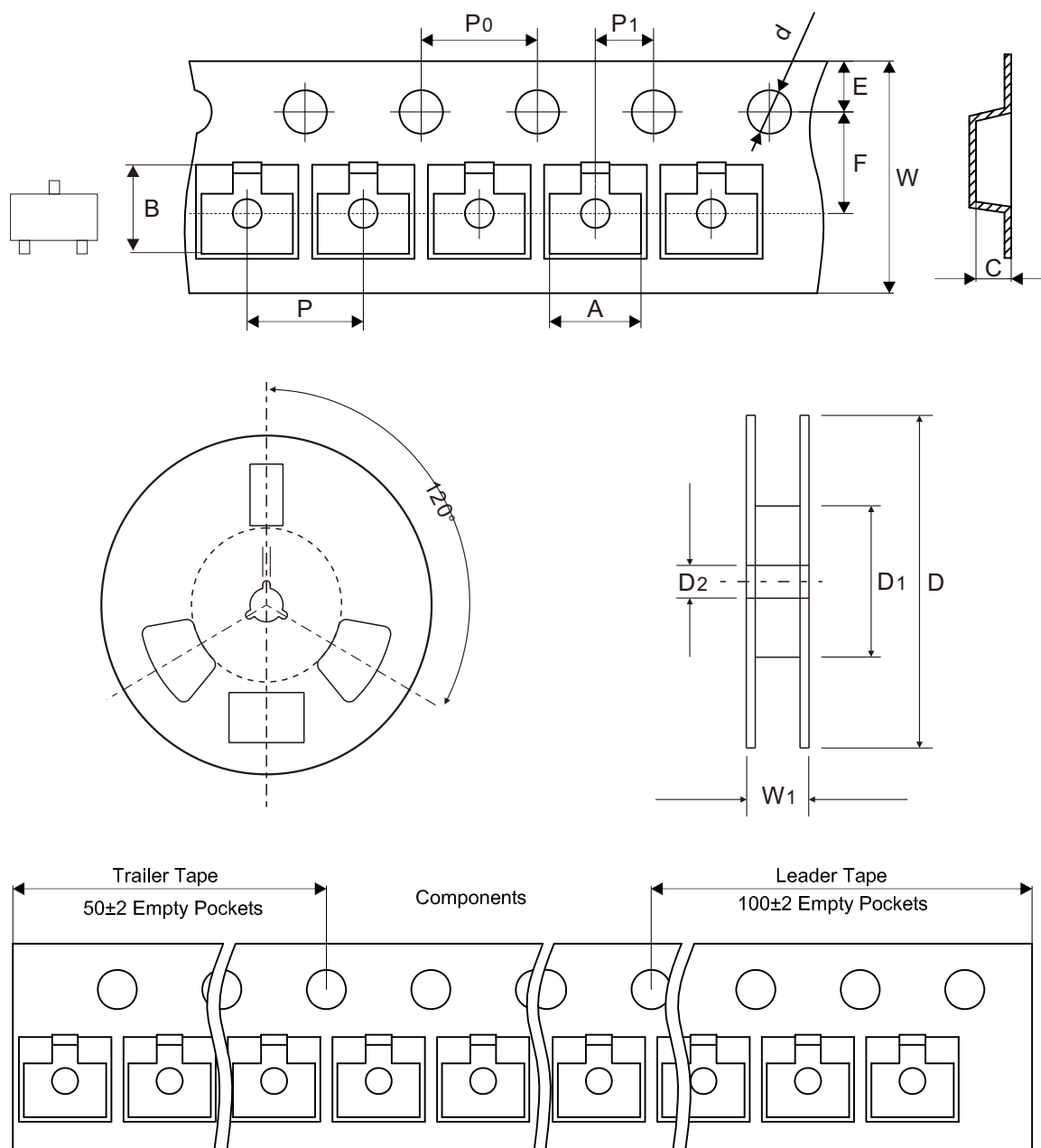
Fig.4 - Reverse Characteristics



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

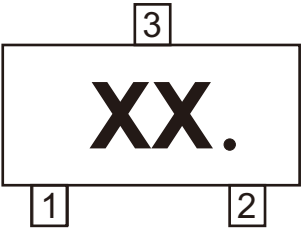
SOT-23	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	$8.00 + 0.30 - 0.10$	11.10 ± 0.20
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	$0.315 + 0.012 - 0.004$	0.437 ± 0.008

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REV:A

Marking Code

Part Number	Marking Code
ABAS16-HF	A6.

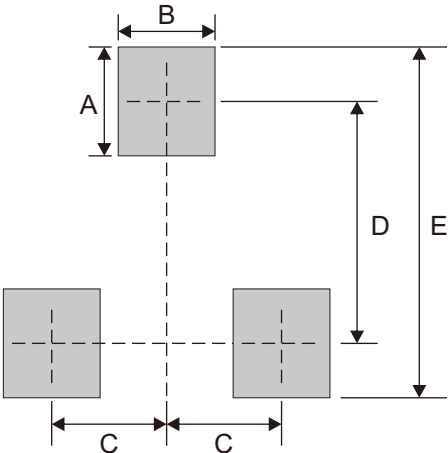


xx = Product type marking code

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

Mouser Electronics

Authorized Distributor

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