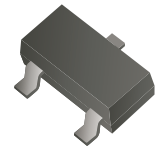


ABAS21/A/C/S-HF

RoHS Device
Halogen Free



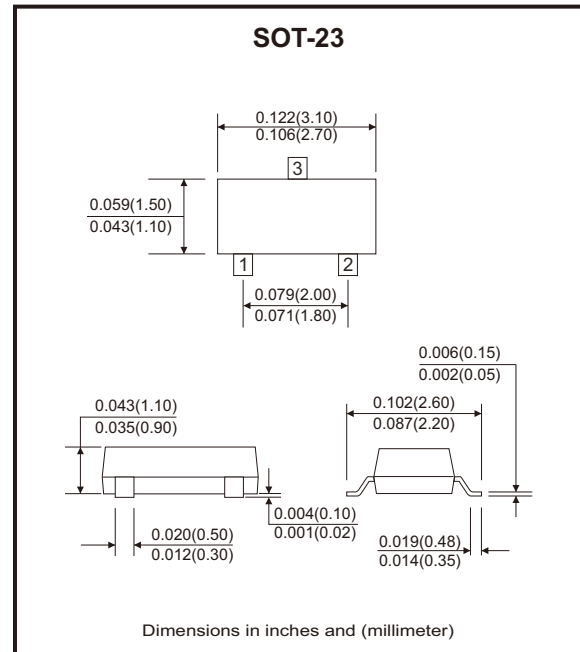
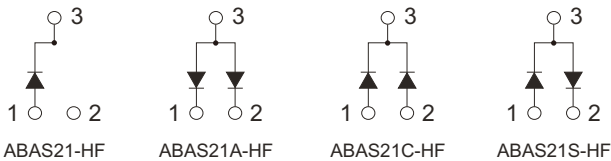
Features

- Fast switching speed.
- Surface mount package ideally suited for automatic insertion.
- For general purpose switching applications.
- High conductance.
- AEC-Q101 Qualified.

Mechanical data

- Case: SOT-23, molded plastic.
- Mounting position: Any.

Circuit Diagram



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

Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	V_{RRM}	250	V
Working peak reverse voltage	V_{RWM}	200	V
DC reverse voltage	V_R		
RMS reverse voltage	V_{RMS}	141	V
Forward continuous current	I_F	200	mA
Non-repetitive peak forward surge current @ t = 8.3ms	I_{FSM}	2	A
Power dissipation	P_D	250	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	500	°C/W
Thermal resistance junction to case	$R_{\theta JC}$	310	°C/W
Operating junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-65 to +150	°C

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

Parameter	Conditions	Symbol	Min.	Max.	Unit
Reverse breakdown voltage	$I_R = 100\mu A$	$V_{(BR)}$	250		V
Reverse leakage current	$V_R = 200V, T_J = 25^\circ C$ $V_R = 200V, T_J = 100^\circ C$	I_R		0.1 15	μA
Forward voltage	$I_F = 100mA$ $I_F = 200mA$	V_F		1000 1250	mV
Diode capacitance	$V_R = 0V, f = 1MHz$	C_D		5	pF
Reverse recovery time	$I_F = I_R = 10mA, I_{rr} = 0.1 \times I_R$	T_{rr}		50	nS

Typical Rating and Characteristic Curves (ABAS21/A/C/S-HF)

Fig.1 - Forward Characteristics

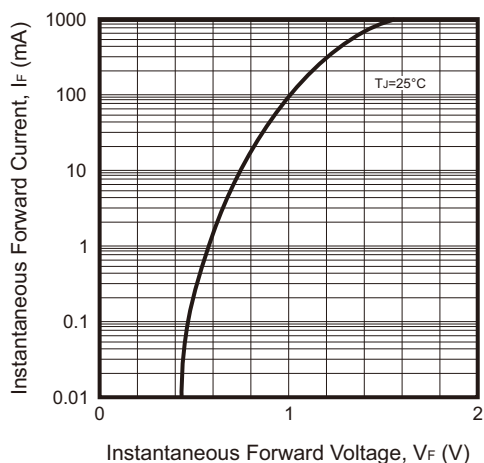
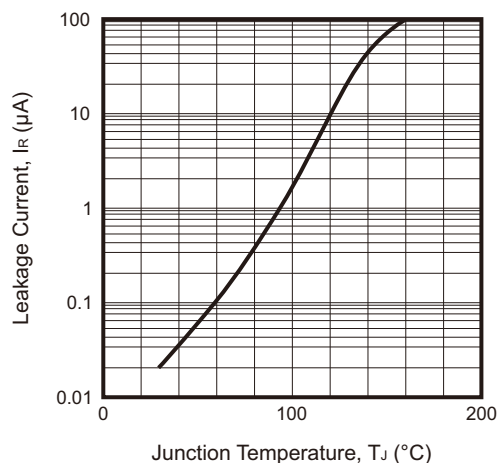
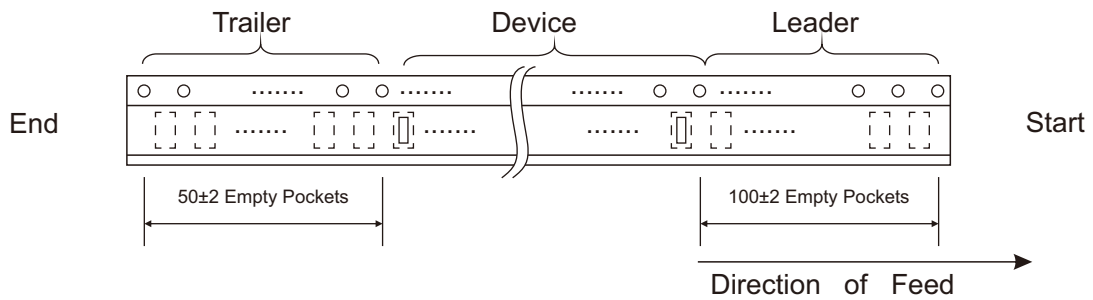
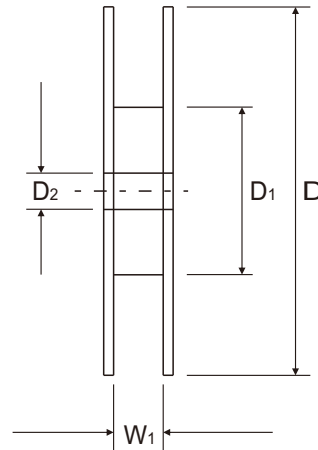
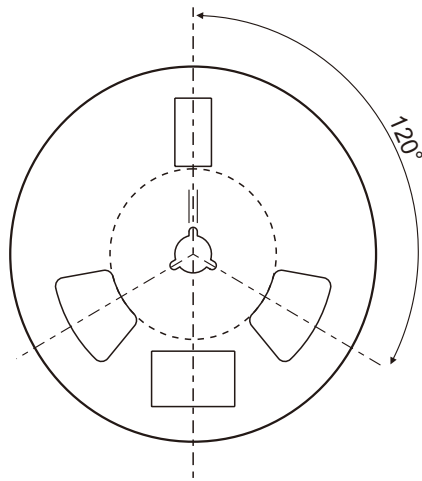
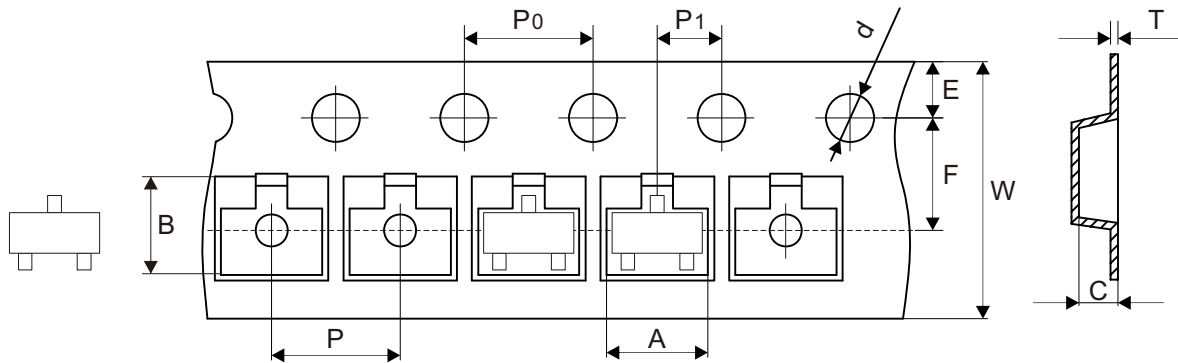


Fig.2 - Leakage Current vs Junction Temperature



Reel Taping Specification

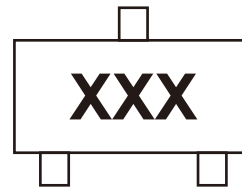


SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 ± 0.10	178.00 ± 1.00	54.00 ± 0.50	13.00 ± 0.50
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 ± 0.004	7.008 ± 0.039	2.126 ± 0.020	0.512 ± 0.020

SOT-23	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.02	8.00 ± 0.30	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.001	0.315 ± 0.012	0.374 ± 0.039

Marking Code

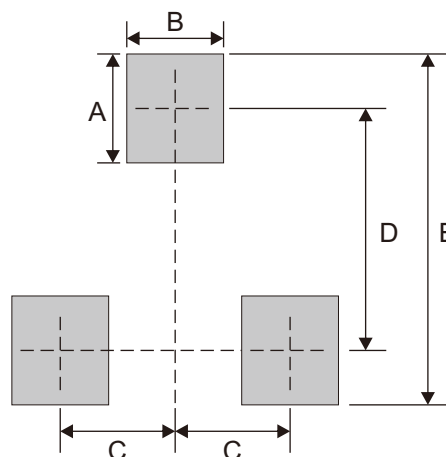
Part Number	Marking Code
ABAS21-HF	JS
ABAS21A-HF	JS2
ABAS21C-HF	JS3
ABAS21S-HF	JS4



xx/xxx = Product type marking code

Suggested P.C.B. 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



Standard Packaging

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