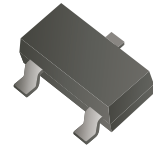


## BAS21/A/C/S-HF

**RoHS Device**  
**Halogen Free**



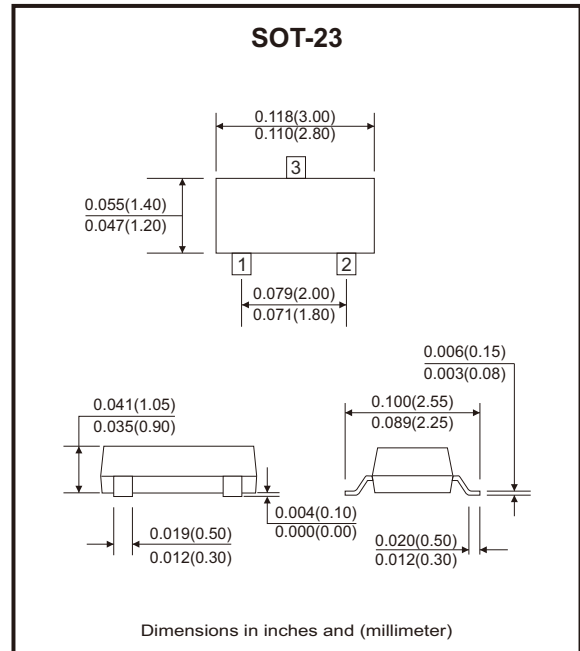
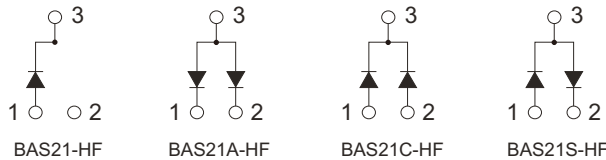
### Features

- Fast switching device ( $T_{rr} < 50 \text{ nS}$ ).
- Power dissipation of 225mW.
- High stability and high reliability.
- Low reverse leakage.

### Mechanical data

- Case: SOT-23, molded plastic.
- Epoxy UL: 94V-0.
- Mounting position: Any.

### Circuit Diagram



### Maximum Ratings (at $T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Reverse voltage	$V_R$	250	V
Peak repetitive reverse voltage	$V_{RRM}$	250	V
Power dissipation	$P_D$	225	mW
Forward continuous current	$I_{FM}$	400	mA
Repetitive peak forward surge current	$I_{FRM}$	625	mA
Non-repetitive peak forward surge current @ $t = 8.3\text{ms}$ , $T_A=25^\circ\text{C}$	$I_{FSM}$	2.5	A
Operating junction temperature	$T_J$	150	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150	$^\circ\text{C}$
Thermal resistance from junction to ambient	$R_{\theta JA}$	555	$^\circ\text{C/W}$

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

Parameter	Conditions	Symbol	Min.	Max.	Unit
Reverse voltage	$I_R = 100\mu A$	$V_{(BR)}$	250		V
Reverse leakage current	$V_R = 200V$	$I_R$		0.1	$\mu A$
Forward voltage	$I_F = 100mA$ $I_F = 200mA$	$V_F$		1.00 1.25	V
Reverse recovery time	$I_F = I_R = 30mA$ , $I_{rr} = 0.1 \times I_R$ , $R_L = 100\Omega$	$T_{rr}$		50	nS
Capacitance	$V_R = 0V$ , $f = 1MHz$	$C_T$		5	pF

## Rating and Characteristic Curves (BAS21/A/C/S-HF)

Fig.1 - Forward Characteristics

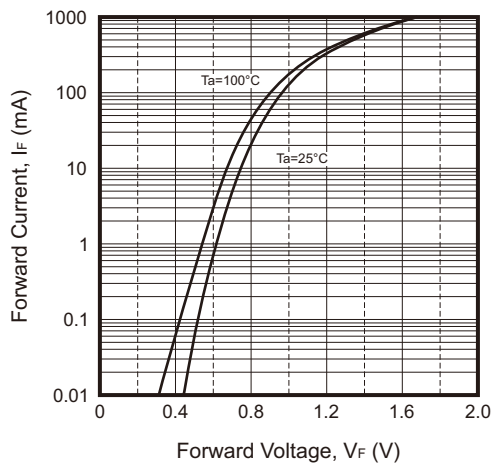


Fig.2 - Reverse Characteristics

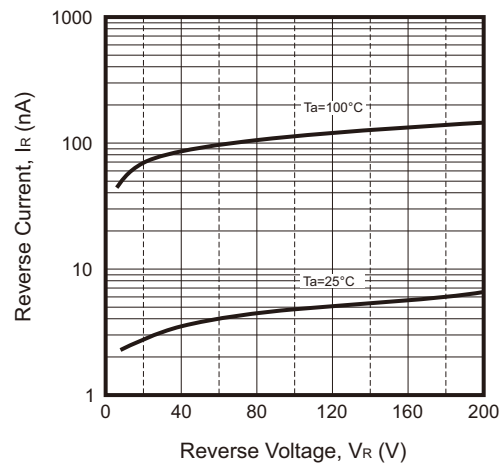


Fig.3 - Capacitance Characteristics

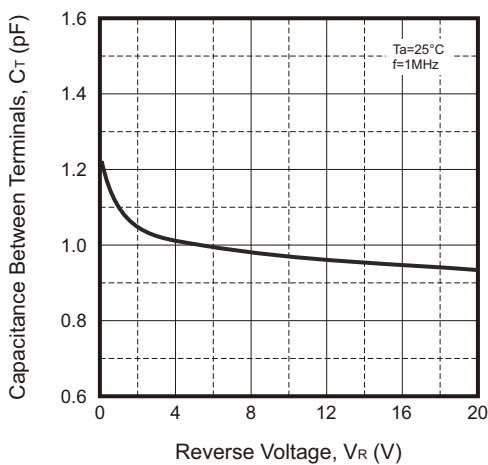
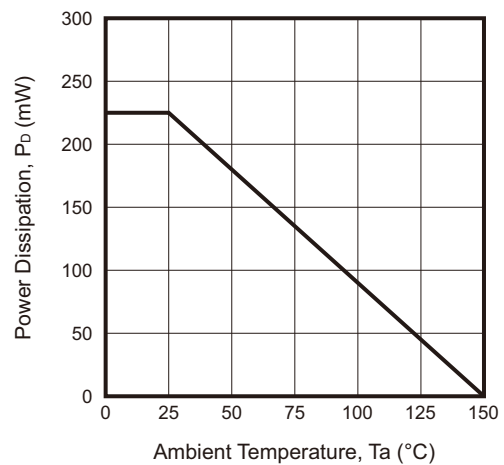


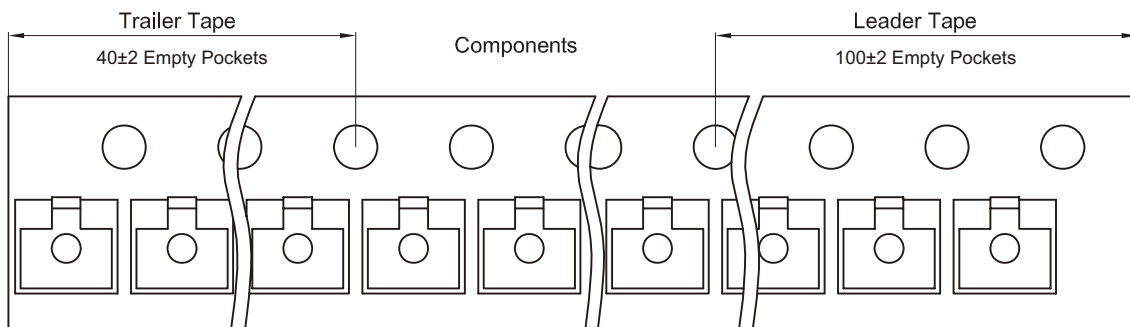
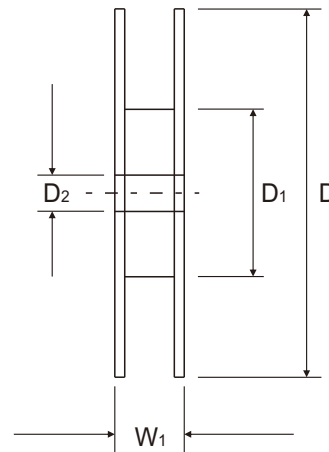
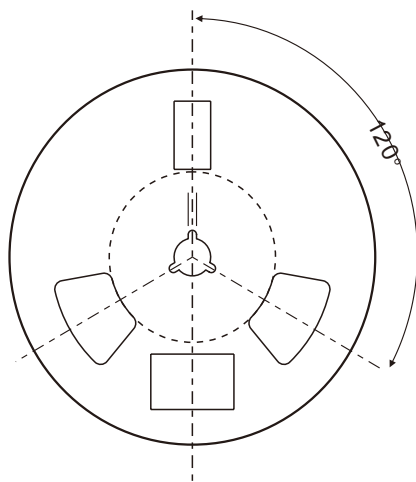
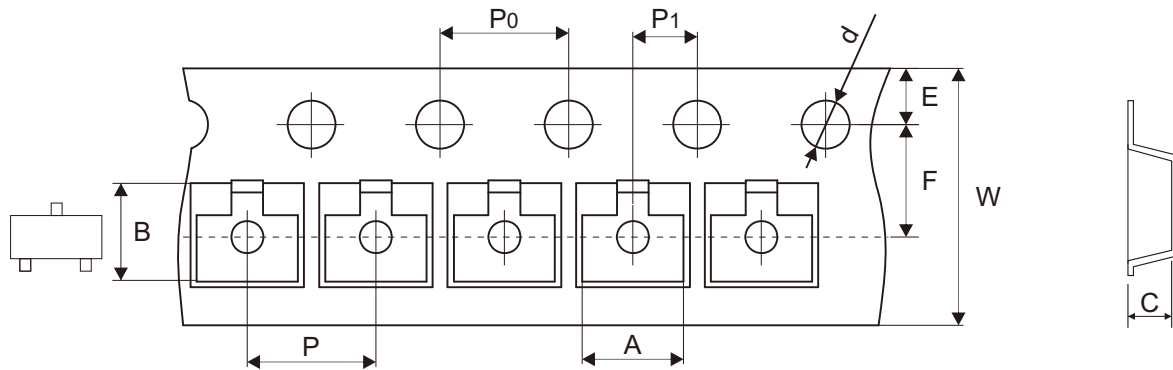
Fig.4 - Power Derating Curve



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)	$3.15 \pm 0.10$	$2.77 \pm 0.10$	$1.22 \pm 0.10$	$1.50 \pm 0.10$	$178.00 \pm 2.00$	$54.40 \pm 1.00$	$13.00 \pm 1.00$
	(inch)	$0.124 \pm 0.004$	$0.109 \pm 0.004$	$0.048 \pm 0.004$	$0.059 \pm 0.004$	$7.008 \pm 0.079$	$2.142 \pm 0.039$	$0.512 \pm 0.039$

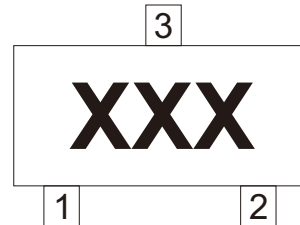
SOT-23	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	$1.75 \pm 0.10$	$3.50 \pm 0.10$	$4.00 \pm 0.10$	$4.00 \pm 0.10$	$2.00 \pm 0.10$	$8.00 \pm 0.10$	$12.30 \pm 1.00$
	(inch)	$0.069 \pm 0.004$	$0.138 \pm 0.004$	$0.157 \pm 0.004$	$0.157 \pm 0.004$	$0.079 \pm 0.004$	$0.315 \pm 0.004$	$0.472 \pm 0.039$

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

REV:A

## Marking Code

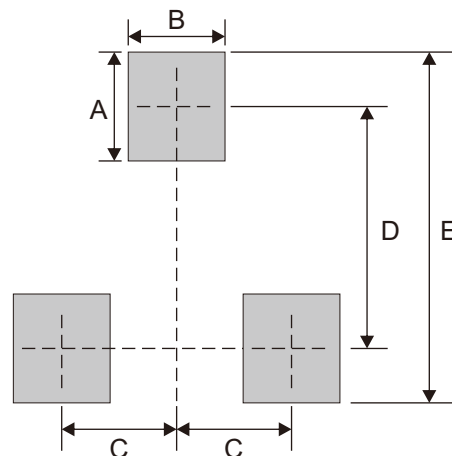
Part Number	Marking Code
BAS21-HF	JS
BAS21A-HF	JS2
BAS21C-HF	JS3
BAS21S-HF	JS4



xx/xxx = 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

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Diodes - General Purpose, Power, Switching category:](#)*

*Click to view products by [Comchip manufacturer:](#)*

Other Similar products are found below :

[RD0306T-H](#) [BAV17-TR](#) [BAV19-TR](#) [1N3611](#) [NTE156A](#) [NTE525](#) [NTE571](#) [NTE5804](#) [NTE5806](#) [NTE6244](#) [1SS181-TP](#) [1SS193,LF](#)  
[1SS400CST2RA](#) [SDAA13](#) [SHN2D02FUTW1T1G](#) [LS4151GS08](#) [1N4449](#) [1N456A](#) [1N4934-E3/73](#) [1N914B](#) [1N914BTR](#) [RFUH20TB3S](#)  
[BAS 28 E6327](#) [BAV199-TP](#) [BAW56DWQ-7-F](#) [BAW75-TAP](#) [MM230L-CAA](#) [IDW40E65D1](#) [JAN1N3600](#) [LL4151-GS18](#) [053684A](#)  
[SMMSD4148T3G](#) [707803H](#) [NSVDAN222T1G](#) [SP000010217](#) [CDSZC01100-HF](#) [BAV199E6433HTMA1](#) [BAV70M3T5G](#) [SMBT2001T1G](#)  
[NTE5801](#) [NTE5800](#) [NTE5808](#) [NTE6240](#) [NTE6248](#) [BAS28-7](#) [BAW56HDW-13](#) [BAS28 TR](#) [VS-HFA04SD60STR-M3](#)  
[NSVM1MA152WKT1G](#) [BAV99TQ-13-F](#)