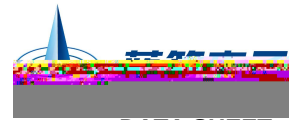


BAS19~BAS21

Rev.F Aug.-2020

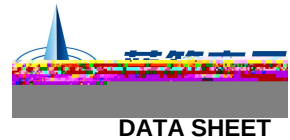


DATA SHEET

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BAS19~BAS21

Rev.F Aug.-2020



描述 / Descriptions

SOT-23

Silicon Diode in a SOT-23 Plastic Package.

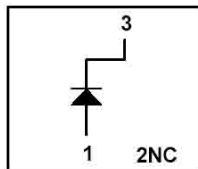
特征 / Features

Small signal diode. HF Product.

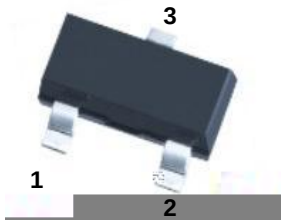
用途 / Applications

High Conductance Ultra Fast Diode.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN: See Equivalent Circuit.

放大及印章代码 / h_{FE} Classifications & Marking

Type	BAS19	BAS20	BAS21
Marking	HT1	HT2	T3H

极限参数 / Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating			Unit
		BAS19	BAS20	BAS21	
Repetitive Reverse Voltage	V _{RRM}	120	200	250	V
Working Peak Reverse Voltage	V _{RWM}	100	150	200	V
RMS Reverse Voltage	V _{R(RMS)}	70	106	141	V
Forward Continuous Current	I _{FM}	400			mA
Average Rectified Output Current	I _O	200			mA
Non-repetitive Peak Forward Surge Current	I _{FSM} (t=1.0μs)	2.0			A
	I _{FSM} (t=1.0s)	0.5			
Repetitive Peak Forward Surge Current	I _{FRM}	625			mA
Power Dissipation	P _d	250			mW
Thermal Resistance, Junction to Ambient	R _{θJA}	500			℃/W
Junction and Storage Temperature Range	T _j T _{stg}	-65~150			℃

电性能参数 / Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Rating			Unit
			BAS19	BAS20	BAS21	
Breakdown Voltage	V_R	$I_R=100\mu A$	120	200	250	V
Forward Voltage	V_{FM}	$I_F=100mA$	1.0			V
		$I_F=200mA$	1.25			V
Instantaneous Reverse Current	I_{RM}	$T_J=25^\circ C$	100			nA
		$T_J=100^\circ C$	15			μA
Total Capacitance	C_T	$V_R=0$ $f=1.0MHz$	5.0			pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=30mA$ $I_{RR}=0.1 \times I_R$ $R_L=100\Omega$	50			ns

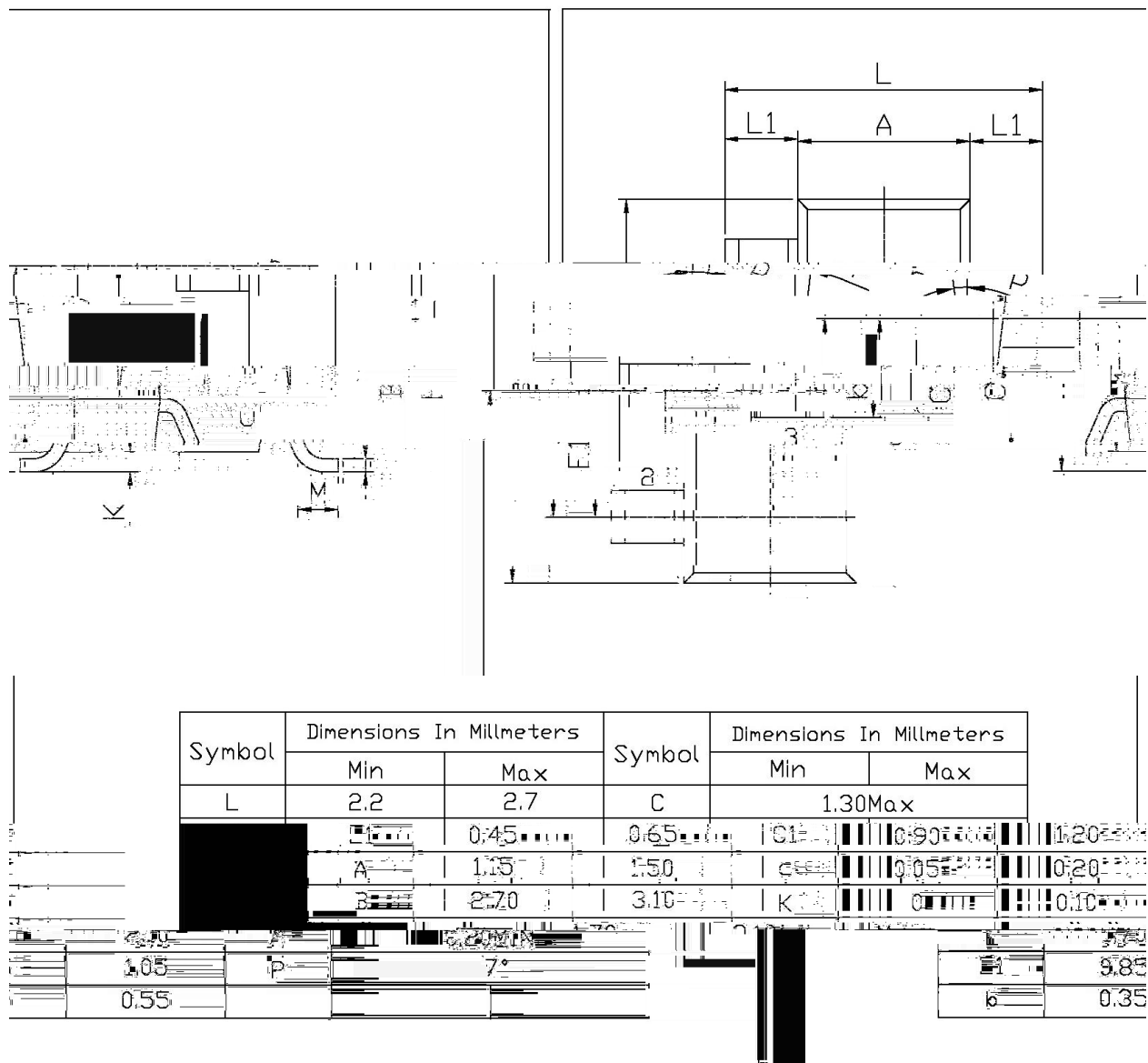
BAS19~BAS21

Rev.F Aug.-2020

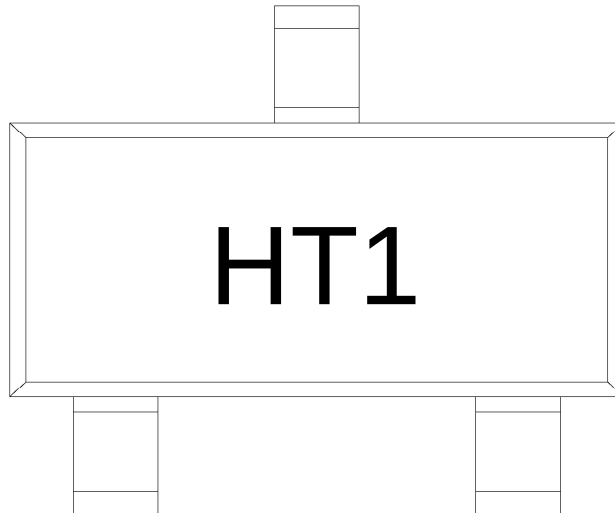
DATA SHEET

外形尺寸图 / Package Dimensions

单位: mm



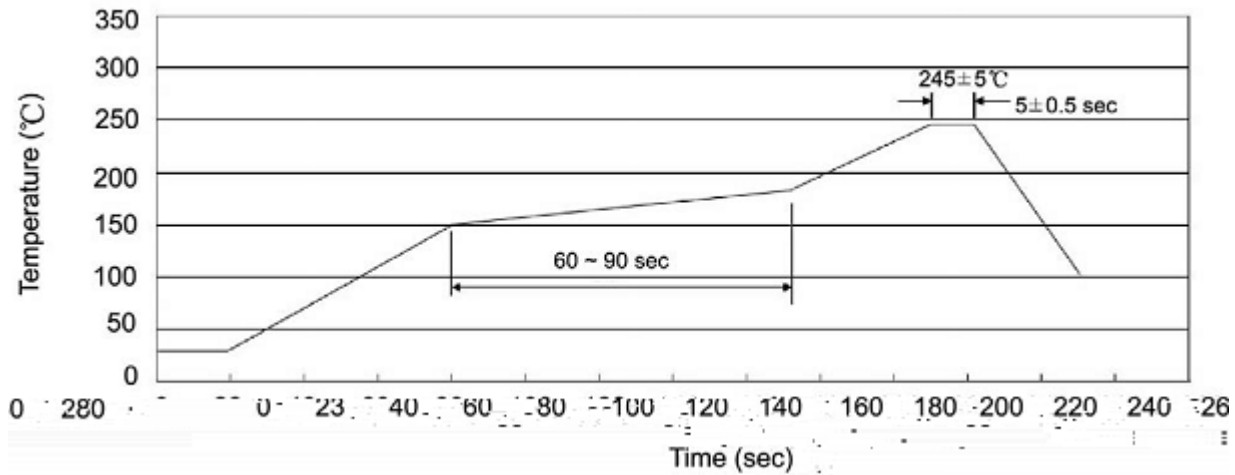
印章说明 / Marking Instructions



Note:

H: Company Code.

T1: Product Type.

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)


Note:

- | | | | | | |
|---|-------|-----|----|-----------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 245±5 | | | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

260±5	10±1 sec.	Temp.:260±5℃	Time:10±1 sec
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包装规格 / Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-23	3,000	10	30,000	8	240,000	7" ×8	180×120×180	385×257×392

使用说明 / Notices