

Descriptions

This is Silicon Diode in a SOT-23 Plastic Package.

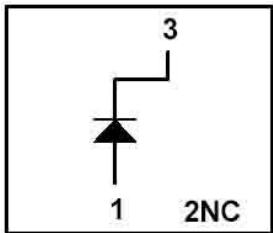
Features

Small signal diode. HF Product.

Applications

High Conductance Ultra Fast Diode.

Equivalent Circuit



Pinning



PIN: See Equivalent Circuit.

Marking

Type	BAS19	BAS20	BAS21
Marking	HT1	HT2	T3H

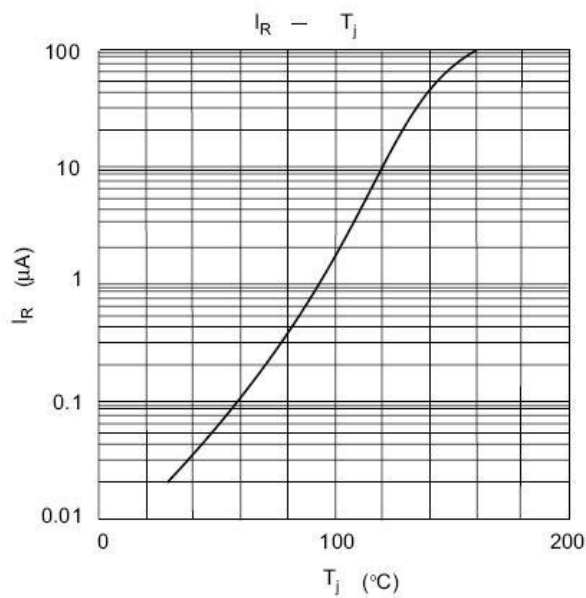
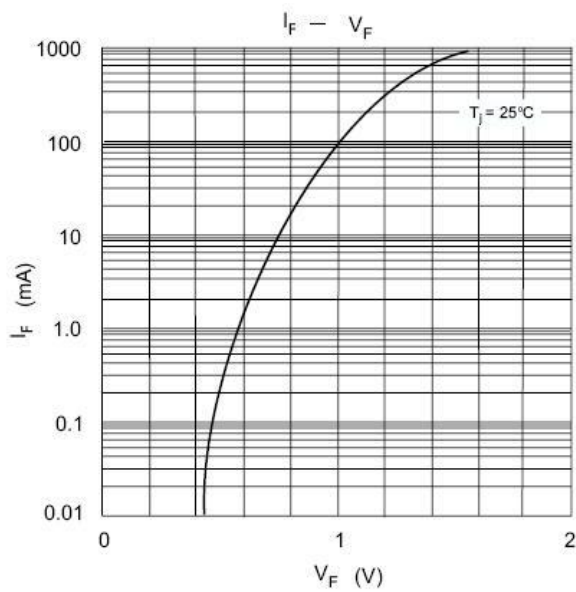
Absolute Maximum Ratings(Ta=25°C)

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			°C/W
Junction and Storage Temperature Range	$T_j T_{stg}$	-65~150			°C

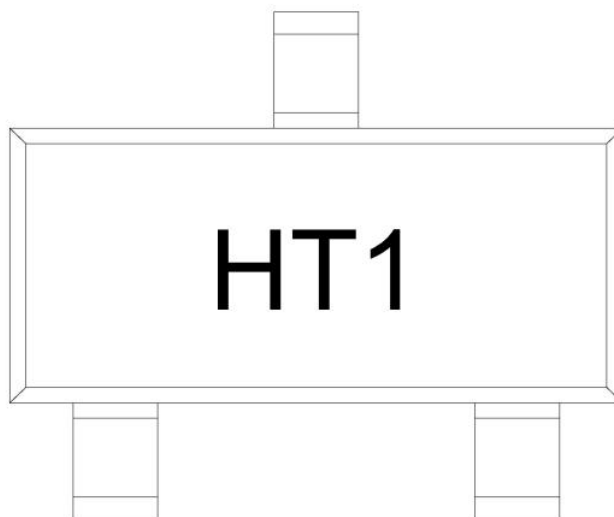
Electrical Characteristics(Ta=25°C)

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

Electrical Characteristic Curve



Marking Instructions



Note:

H: Company Code.

T1: Product Type.

Packaging SPEC

REEL

Package Type	Units					Dimension (unit: mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOT-23	3,000	10	30,000	8	240,000	7" ×8	180×120×180	385×257×392

Package Outline Dimensions

SOT-23

单位: mm

