

BAS21W-AU

SURFACE MOUNT SWITCHING DIODES

Voltage

250 V

Power

200mW

Features

- Fast switching speed
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

Mechanical Data

- Case: SOT-323, Plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Weight: 0.0002 ounces, 0.005 grams

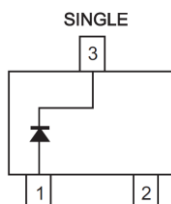
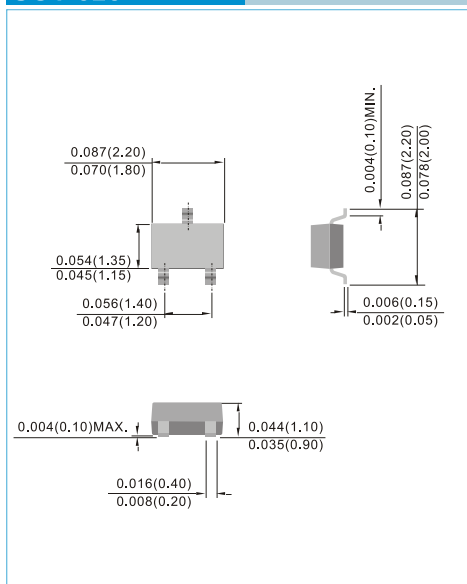


Fig. 14(TOP VIEW)

SOT-323

Unit : inch(mm)



Maximum Ratings And Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Marking Code		A82	
Reverse Voltage	V_R	200	V
Peak Reverse Voltage	V_{RM}	250	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and $f \geq 50\text{Hz}$	I_O	200	mA
Peak Forward Surge Current : $1\mu\text{s}$	I_{FSM}	4	A
Power Dissipation Derate Above 25°C	P_{TOT}	200	mW
Maximum Forward Voltage at 0.1A	V_F	1	V
Maximum Dc Reverse Current at Rated Dc Blocking Voltage $T_J=25^{\circ}\text{C}$	I_R	0.1	μA
Typical Junction Capacitance (Note 1)	C_J	5	pF
Maximum Reverse Recovery (Note 2)	T_{RR}	50	ns
Typical Thermal Resistance	$R_{\theta JA}$	625	$^{\circ}\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^{\circ}\text{C}$

Note : 1. C_J at $V_R=0$, $f=1\text{MHz}$

2. From $I_F=10\text{mA}$ to $I_R=1\text{mA}$, $V_R=6\text{V}$, $R_L=100\Omega$

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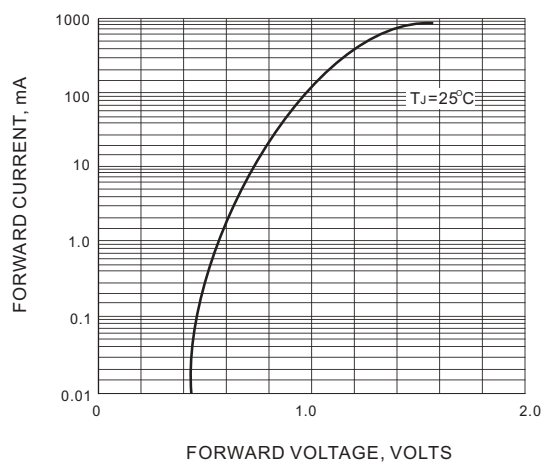


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

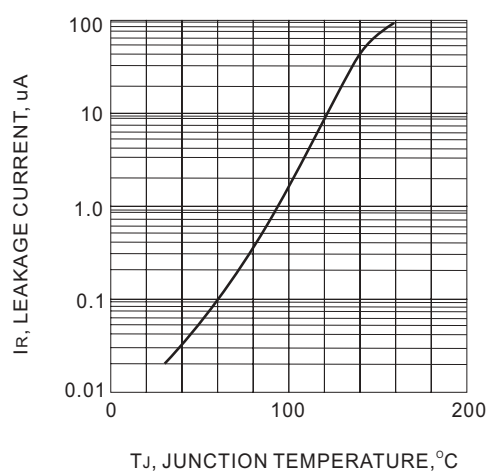


Fig.2 LEAKAGE CURRENT vs JUNCTION TEMPERATURE

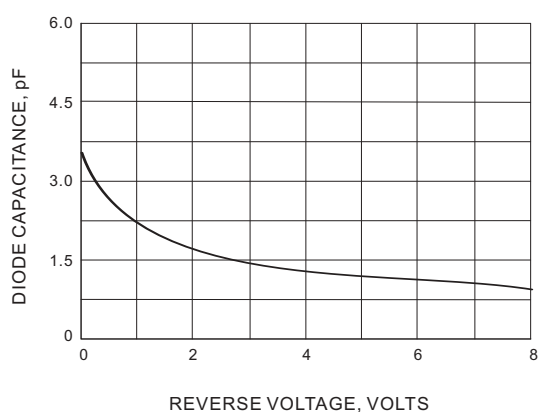


FIG. 3 TYPICAL JUNCTION CAPACITANCE

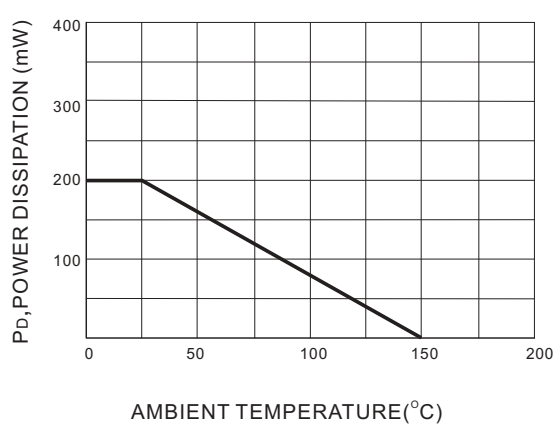


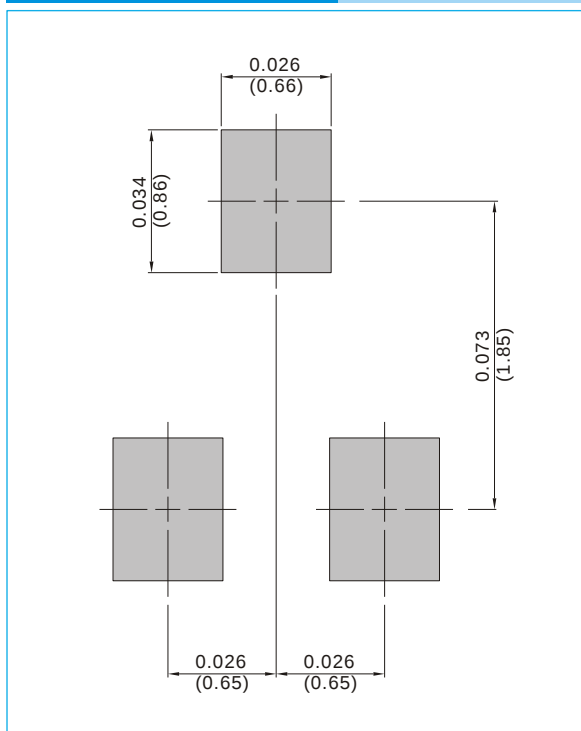
FIG. 4 POWER DERATING CURVE

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MOUNTING PAD LAYOUT

SOT-323

Unit : inch(mm)



ORDER INFORMATION

- Packing information
T/R – 12K per 13" plastic Reel
T/R – 3K per 7" plastic Reel



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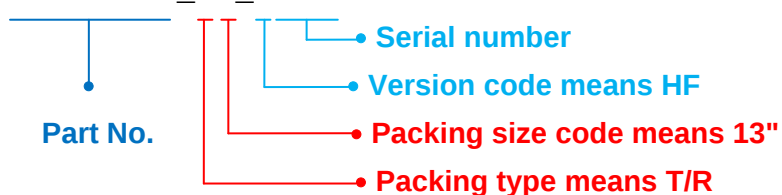
Part No_packing code_Version

BAS21W-AU_R1_000A1

BAS21W-AU_R2_000A1

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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