



BAS16-AU~BAS21-AU

SURFACE MOUNT SWITCHING DIODES

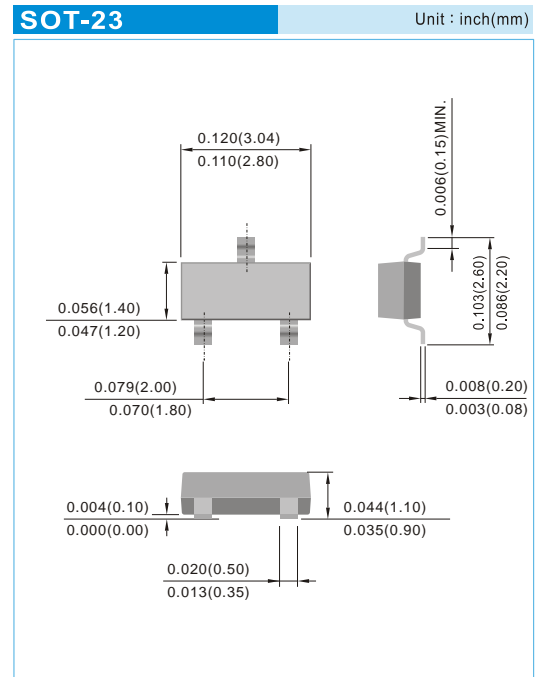
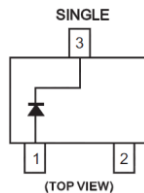
Voltage 100~250 V **POWER** 350 mW

Features

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard
- AEC-Q101 qualified

Mechanical Data

- Case: SOT-23, Plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounces, 0.0084 grams



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

PARAMETER	SYMBOL	BAS16-AU	BAS19-AU	BAS20-AU	BAS21-AU	UNIT
Marking Code		A6	A8	A80	A82	
Reverse Voltage	V_R	75	100	150	200	V
Peak Reverse Voltage	V_{RM}	100	120	200	250	V
Rectified Current (Average), Half Wave Rectification With Resistive Load And $f \geq 50\text{Hz}$	I_O	250	200	200	200	mA
Peak Forward Surge Current, $t_p=1\mu\text{s}$ Single Half Sine-Wave Superimposed On Rated Load	I_{FSM}	2	2.5	2.5	2.5	A
Power Dissipation Derate Above 25°C	P_{TOT}	350	350	350	350	mW
Maximum Forward Voltage	V_F	0.855@10mA	1.0@100mA	1.0@100mA	1.0@100mA	V
Maximum Dc Reverse Current At Rated Dc Blocking Voltage $T_J=25^\circ\text{C}$	I_R	1	1	1	1	μA
Typical Junction Capacitance (Notes1)	C_J	2	1.5	1.5	1.5	pF
Maximum Reverse Recovery Time (Note 2)	T_{RR}	6	50	50	50	nS
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	357				$^\circ\text{C/W}$
Operating Junction Temperature And Storage Temperature Range	T_J, T_{STG}	-55 to +150				$^\circ\text{C}$

NOTES :

1. C_J at $V_R=0$, $f=1\text{MHz}$
2. From $I_F=10\text{mA}$ to $I_R=1\text{mA}$, $V_R=6\text{Volts}$, $R_L=100\Omega$
3. Mounted on a FR-4 PCB, single-sided copper, with 100cm^2 copper pad area



BAS16-AU~BAS21-AU

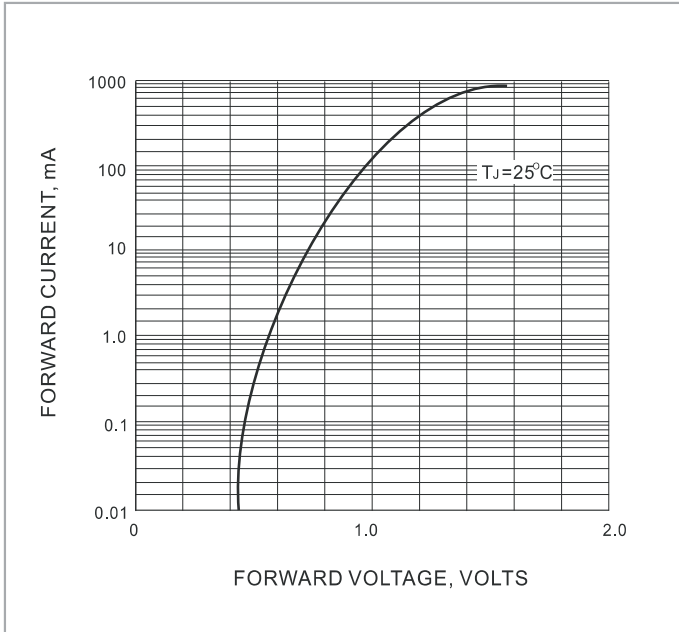


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

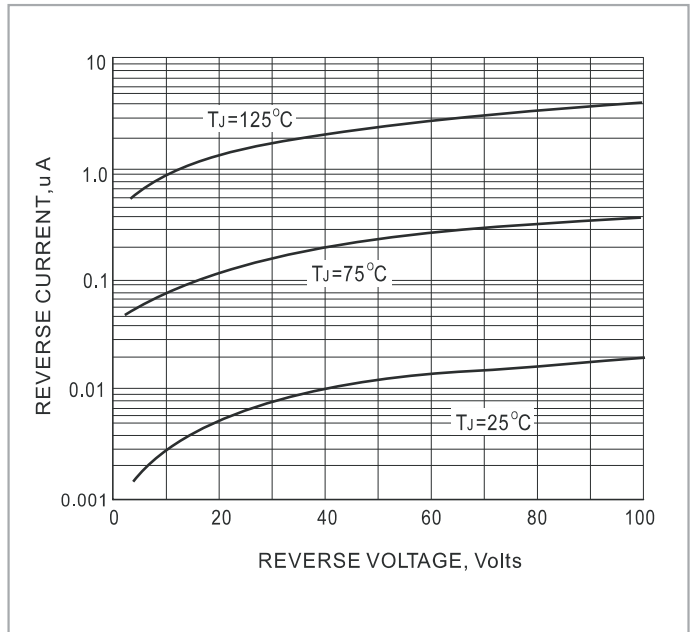


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

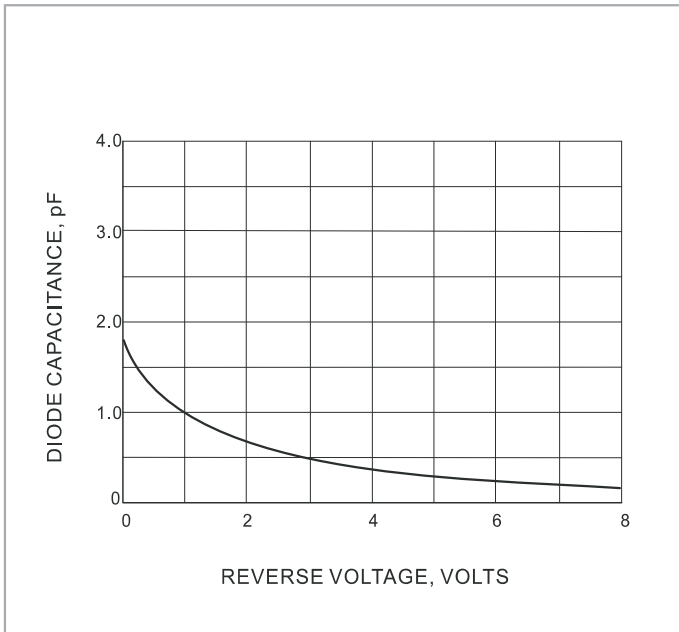


FIG. 3 TYPICAL JUNCTION CAPACITANCE

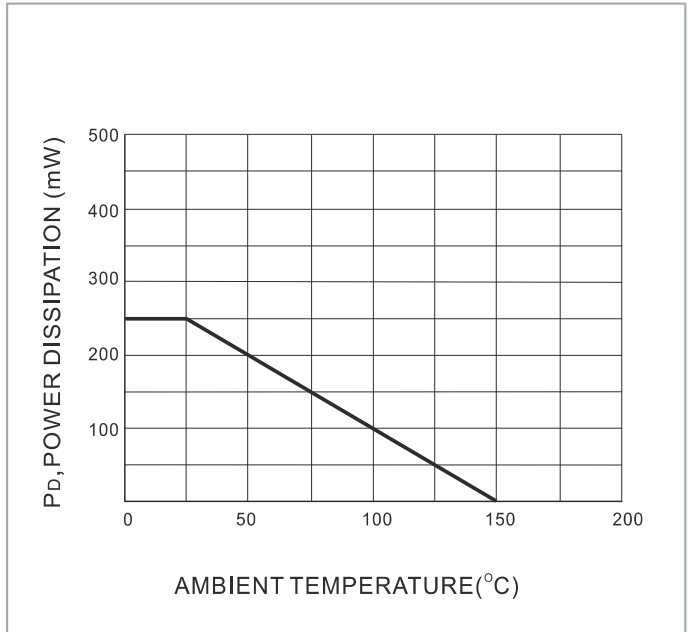
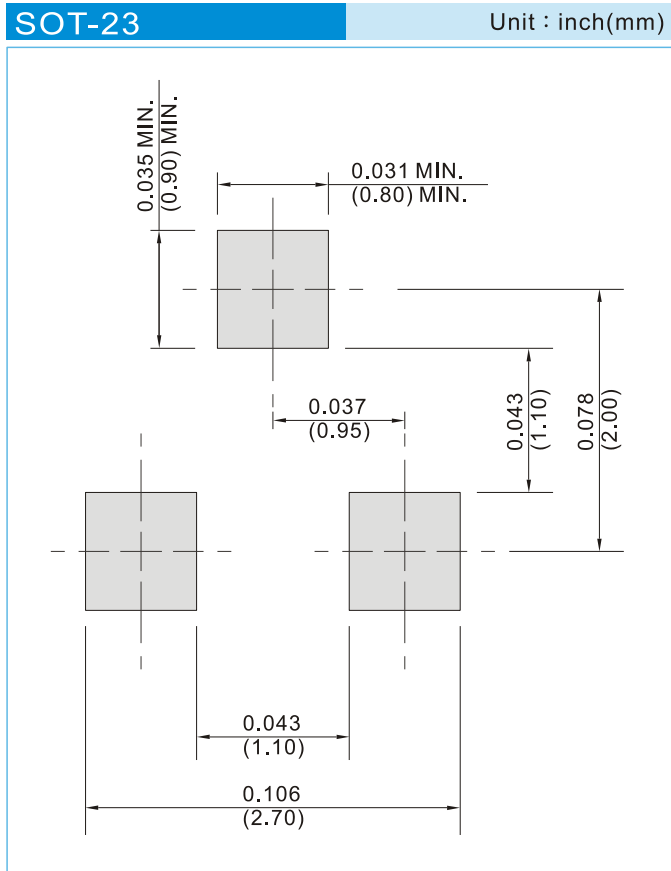


FIG. 4 POWER DERATING CURVE



BAS16-AU~BAS21-AU

MOUNTING PAD LAYOUT



ORDER INFORMATION

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



BAS16-AU~BAS21-AU

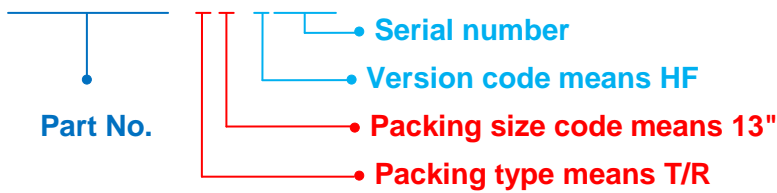
Part No_packing code_Version

BAS16-AU_R1_000A1

BAS16-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			



BAS16-AU~BAS21-AU

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Panjit:](#)

[BAS21-AU_R1_000A1](#) [BAS21-AU_R1_100A1](#) [BAS21-AU_R2_000A1](#) [BAS21-AU_R2_100A1](#)