

BAS21A~BAS21S

SURFACE MOUNT, HIGH VOLTAGE, DUAL SWITCHING DIODES

Voltage	250 V	Power	250 mW
----------------	--------------	--------------	---------------

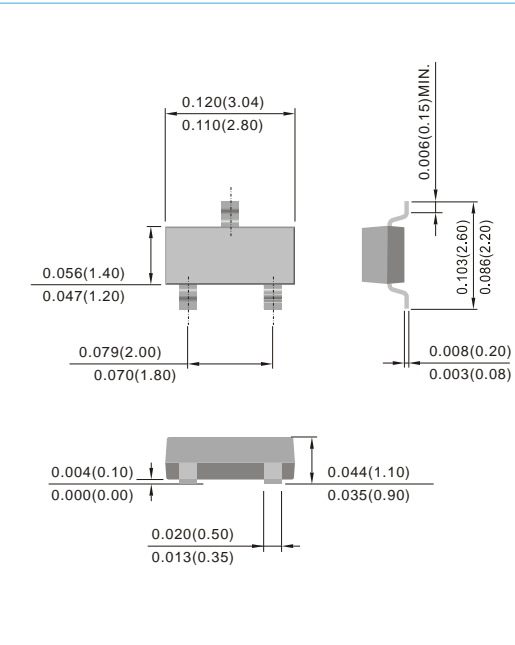
SOT-23 Unit : inch(mm)

Features

- High reverse breakdown voltage.
- Fast switching speed.
- Low reverse leakage current.
- Surface mount package ideally suited for automatic insertion.
- Galvanically isolated dual configurations to save board space.
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive).
- Green molding compound as per IEC61249 Std..(Halogen Free)

Mechanical Data

- Case: SOT-23 plastic case
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounces, 0.008 grams
- Marking: BAS21A:21A, BAS21C:21C, BAS21S:21S



ABSOLUTE RATINGS

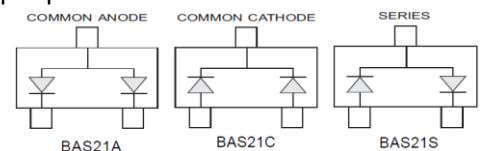
PARAMETER	SYMBOL	VALUE	UNIT
Maximum reverse voltage	V_R	250	V
Peak reverse voltage	V_{RRM}	250	V
Average rectified current at temp=25 °C	I_O	0.2	A
Non-repetitive peak forward surge current at t=1μs	I_{FSM}	4	A

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNIT
Power dissipation	P_{TOT}	250	mW
Typical thermal resistance (Note 1)	$R_{\theta JA}$	357	°C/W
Typical thermal resistance (Note 2)	$R_{\theta JC}$	250	°C/W
	$R_{\theta JL}$	285	
Junction temperature range	T_J	150	°C
Storage temperature range	T_{STG}	-55 to +150	°C

Note : 1.Mounted on a FR-4 PCB, single-sided copper, mini pad.

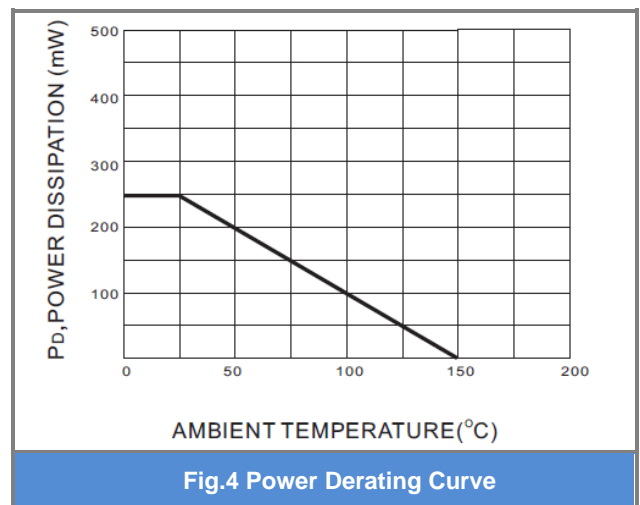
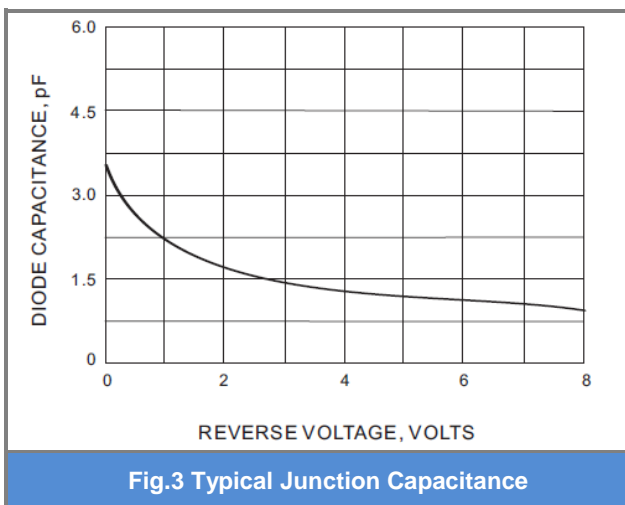
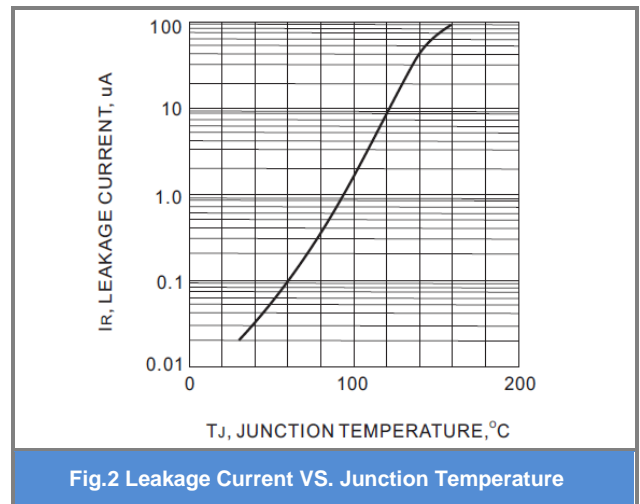
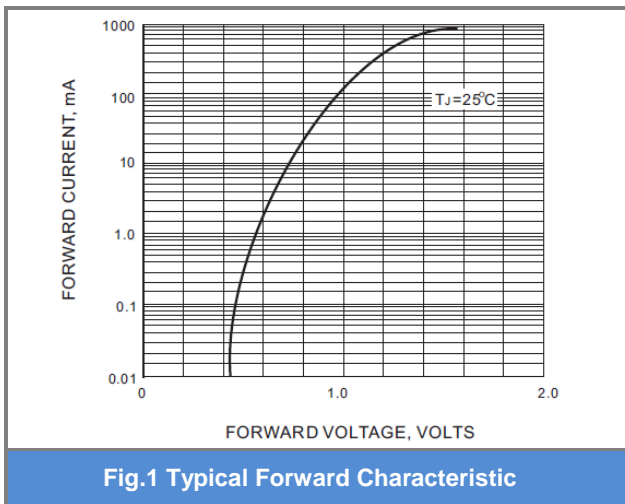
2. Mounted on a FR-4 PCB, single-sided copper, with 100cm² copper pad area.



BAS21A~BAS21S

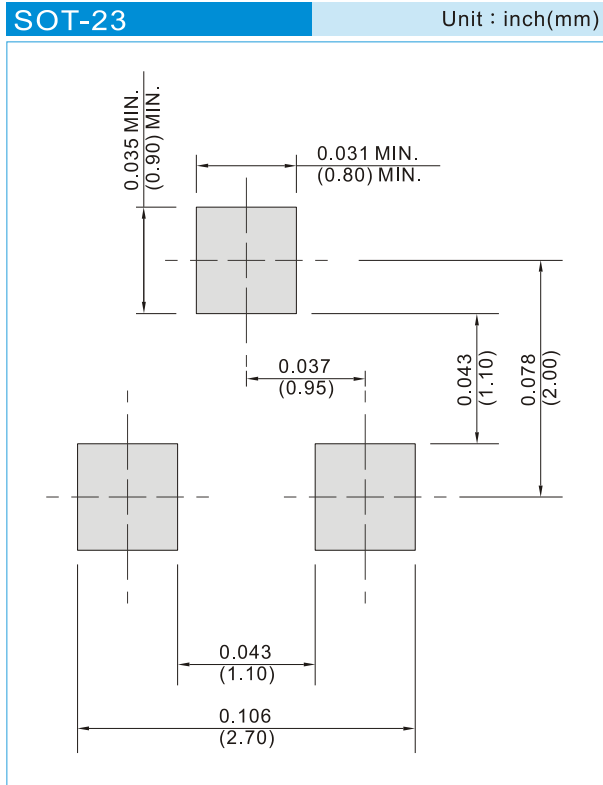
ELECTRICAL CHARACTERISTICS (T_J=25 °C, unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP	MAX.	UNIT
Reverse breakdown voltage	V _(BR)	I _R =100μA	250	-	-	V
Reverse current	I _R	V _R =200V V _R =200V T _J =150°C	-	-	0.1 100	μA
Forward voltage	V _F	I _F =1mA I _F =100mA	-	-	0.7 1	V
Maximum junction capacitance	C _J	V _R =0V, f=1MHz	-	-	5	pF
Reverse recovery time	T _{RR}	I _F = I _R =30mA R _L =100Ω	-	-	50	ns



BAS21A~BAS21S

MOUNTING PAD LAYOUT



ORDER INFORMATION

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

BAS21A~BAS21S

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 requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, 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.