

## BAS16H

### Surface Mount Switching Diodes

#### Features

- Fast switching.
- Designed for surface mount application.
- Plastic material-UL recognition flammability classification 94V-O
- RoHS compliant package

#### Applications

- Surface mount fast switching diode

**Mechanical Case:** SOD-323

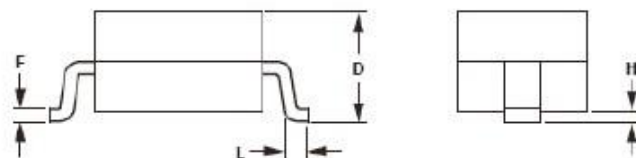
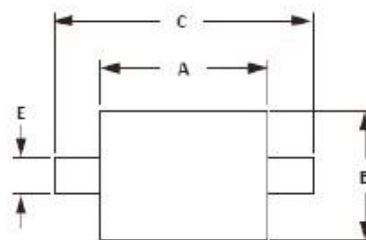
#### Packing & Order Information

3,000/Reel



**RoHS  
COMPLIANT**

Graphic symbol



OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.90	0.063	0.075
B	1.15	1.45	0.045	0.057
C	2.39	2.70	0.094	0.106
D	0.80	1.10	0.031	0.043
E	0.25	0.40	0.010	0.016
F	0.10	0.20	0.004	0.008
H	-	0.10	-	0.004
L	0.20	-	0.008	-

**NOTES**  
 1. Controlling dimension: millimeters.  
 2. Dimensioning and tolerances per ANSI Y14.5M, 1985.  
 3. Dimensions are exclusive of mold flash and metal burrs.

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Unit
V <sub>R</sub>	Continuous Reverse Voltage	75	V
I <sub>F</sub>	Forward Continuous Current	200	mA
I <sub>FSM</sub>	Peak forward surge current	500	mA
P <sub>d</sub>	Power Dissipation	200	mW
R <sub>θJA</sub>	Thermal Resistance Junction to Ambient	635	°C/W
T <sub>j</sub> , T <sub>stg</sub>	Junction and Storage Temperature Range	-55 to +150	°C

## BAS16H

### Surface Mount Switching Diodes

#### ELECTRICAL CHARACTERISTICS @ $T_a=25^{\circ}\text{C}$ unless otherwise specified

Symbol	Parameter	Test Conditions	MIN	TYP	MAX	UNIT
$V_{(RB)R}$	Reverse Breakdown Voltage	$I_R = 100\mu\text{A}$	75			V
$V_F$	Forward Voltage	$I_F = 1.0\text{ mA}$ $I_F = 10\text{ mA}$ $I_F = 50\text{ mA}$ $I_F = 150\text{ mA}$			715 855 1000 1250	mV
$I_R$	Reverse Current	$V_R = 75\text{ V}$ $V_R = 75\text{ V}, T_J = 150^{\circ}\text{C}$ $V_R = 25\text{ V}, T_J = 150^{\circ}\text{C}$			1.0 50 30	$\mu\text{A}$
$C_D$	Diode Capacitance	$V_R=0, f=1.0\text{MHz}$			2	pF
$V_{FR}$	Forward recovery voltage	$I_F = 10\text{ mA}, t_r = 20\text{ nS}$			1.75	V
$Q_S$	Stored Charge	$I_F = 10\text{ mA to } V_R = 5.0\text{ V}$ $R_L = 500\ \Omega$			45	pC
$T_{rr}$	Reverse Recovery	$I_F = I_R = 10\text{ mA}, R_L = 50\ \Omega$			5	ns

#### ORDERING INFORMATION

Type No.	Marking	Package Code
BAS16H	A6	SOD-323

## BAS 16H

### Surface Mount Switching Diodes

■ TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified

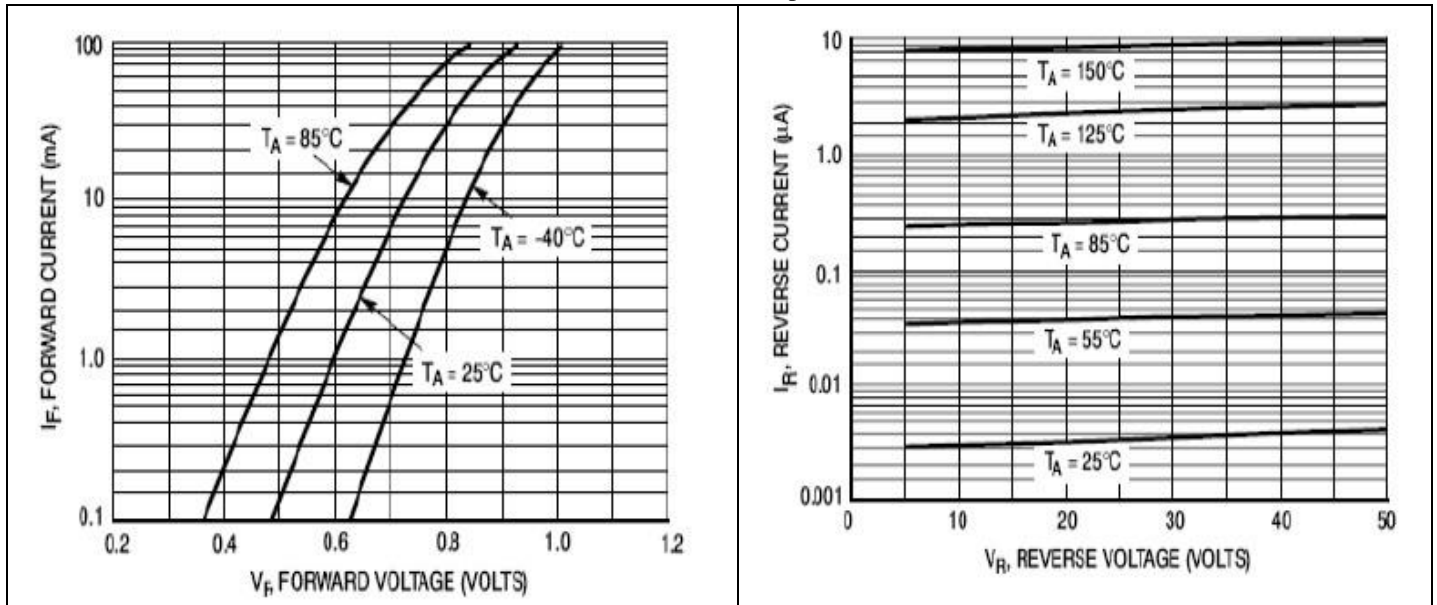


FIG.2 - FORWARD VOLTAGE

FIG.3 - LEAKAGE CURRENT

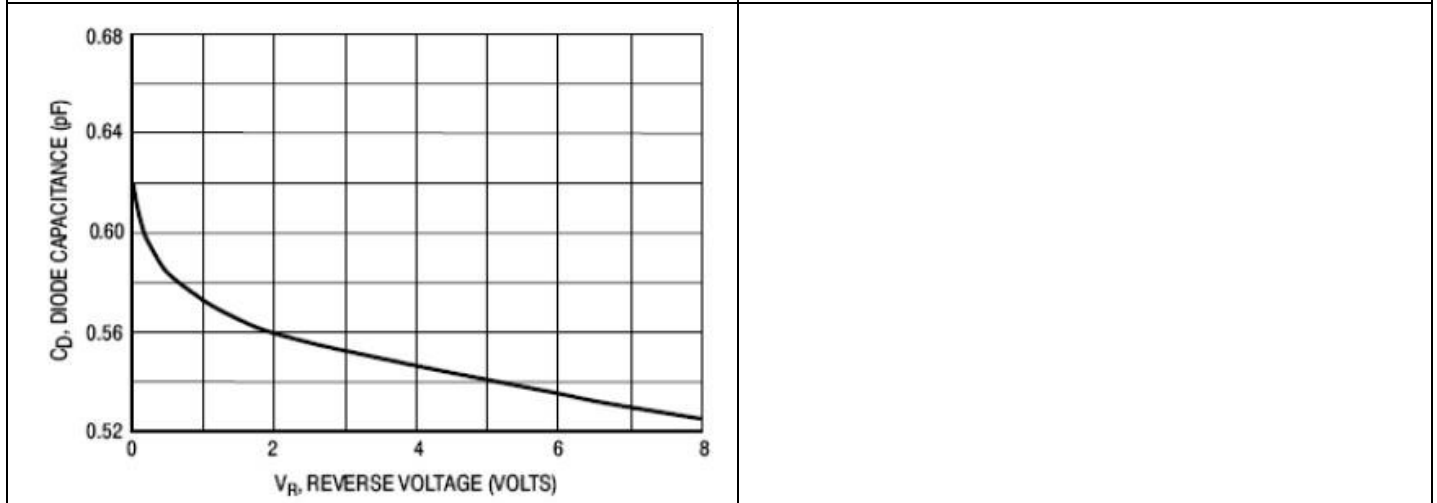


FIG.4 - CAPACITANCE

## BAS 16H

### Surface Mount Switching Diodes

#### Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE

WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Bruckewell Technology Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Bruckewell"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Bruckewell makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Bruckewell disclaims

- (i) Any and all liability arising out of the application or use of any product.
- (ii) Any and all liability, including without limitation special, consequential or incidental damages.
- (iii) Any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Bruckewell's knowledge of typical requirements that are often placed on Bruckewell products in generic applications.

Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time.

Product specifications do not expand or otherwise modify Bruckewell's terms and conditions of purchase, including but not limited to the warranty expressed therein.