

**BAS28**

**SURFACE MOUNT  
DUAL, ISOLATED HIGH SPEED  
SILICON SWITCHING DIODES**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR BAS28 consists of two electrically isolated ultra-high speed silicon switching diodes manufactured by the epitaxial planar process and packaged in an epoxy molded SOT-143 surface mount case. This device is designed for high speed switching applications.

**MARKING CODE: A61 or JTW**

**MAXIMUM RATINGS: (T<sub>A</sub>=25°C)**

Continuous Reverse Voltage	V <sub>R</sub>	75	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	85	V
Continuous Forward Current	I <sub>F</sub>	250	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	500	mA
Peak Forward Surge Current, tp=1.0µs	I <sub>FSM</sub>	4.0	A
Peak Forward Surge Current, tp=1.0ms	I <sub>FSM</sub>	2.0	A
Peak Forward Surge Current, tp=1.0s	I <sub>FSM</sub>	1.0	A
Power Dissipation	P <sub>D</sub>	350	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	θ <sub>JA</sub>	357	°C/W

**SYMBOL**

**UNITS**

**ELECTRICAL CHARACTERISTICS PER DIODE: (T<sub>A</sub>=25°C unless otherwise noted)**

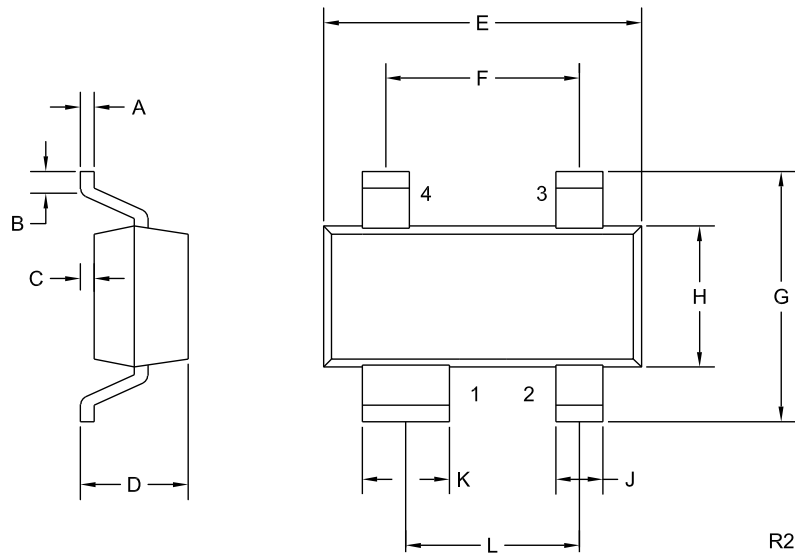
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =25V, T <sub>A</sub> =150°C		30	µA
I <sub>R</sub>	V <sub>R</sub> =75V		1.0	µA
I <sub>R</sub>	V <sub>R</sub> =75V, T <sub>A</sub> =150°C		50	µA
V <sub>F</sub>	I <sub>F</sub> =1.0mA		715	mV
V <sub>F</sub>	I <sub>F</sub> =10mA		855	mV
V <sub>F</sub>	I <sub>F</sub> =50mA		1.00	V
V <sub>F</sub>	I <sub>F</sub> =150mA		1.25	V
C <sub>T</sub>	V <sub>R</sub> =0, f=1.0MHz		2.0	pF
t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>rr</sub> =1.0mA, R <sub>L</sub> =100Ω		6.0	ns
Q <sub>s</sub>	I <sub>F</sub> =10mA, V <sub>R</sub> =5.0V, R <sub>L</sub> =500Ω		45	pC
V <sub>FR</sub>	I <sub>F</sub> =10mA, t <sub>r</sub> =20ns		1.75	V

BAS28

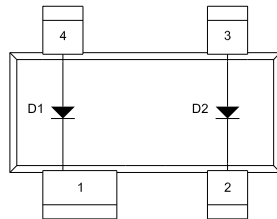
SURFACE MOUNT  
DUAL, ISOLATED HIGH SPEED  
SILICON SWITCHING DIODES



SOT-143 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:

- 1) CATHODE D1
- 2) CATHODE D2
- 3) ANODE D2
- 4) ANODE D1

MARKING CODE: A61 or JTW

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.006	0.08	0.15
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	-	0.045	-	1.14
E	0.110	0.120	2.79	3.04
F	0.075		1.90	
G	-	0.098	-	2.50
H	0.047	0.055	1.19	1.40
J	0.014	0.020	0.36	0.50
K	0.030	0.037	0.76	0.93
L	0.067		1.70	

SOT-143 (REV: R2)

R7 (20-October 2010)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

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