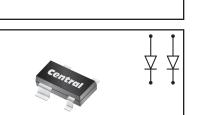
## **BAS28**

# SURFACE MOUNT SILICON DUAL, ISOLATED HIGH SPEED SWITCHING DIODES

SOT-143 CASE





www.centralsemi.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)	SYMBOL		UNITS
Continuous Reverse Voltage	$V_{R}$	75	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	85	V
Continuous Forward Current	ΙF	250	mA
Peak Repetitive Forward Current	IFRM	500	mA
Peak Forward Surge Current, tp=1.0µs	<sup>I</sup> FSM	4.0	Α
Peak Forward Surge Current, tp=1.0ms	<sup>I</sup> FSM	2.0	Α
Peak Forward Surge Current, tp=1.0s	<sup>I</sup> FSM	1.0	Α
Power Dissipation	$P_{D}$	350	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	$\Theta_{\sf JA}$	357	°C/W

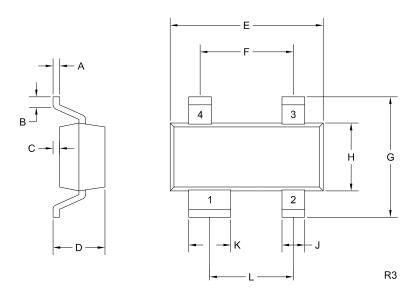
ELECTRICAL CHARACTERISTICS PER DIODE: (T <sub>A</sub> =25°C unless otherwise noted)							
SYMBOL IR	TEST CONDITIONS V <sub>R</sub> =25V, T <sub>A</sub> =150°C	MIN	<b>MAX</b> 30	<b>UNITS</b> μΑ			
$I_{R}$	V <sub>R</sub> =75V		1.0	μΑ			
$I_{R}$	V <sub>R</sub> =75V, T <sub>A</sub> =150°C		50	μΑ			
$V_{F}$	I <sub>F</sub> =1.0mA		715	mV			
VF	I <sub>F</sub> =10mA		855	mV			
VF	I <sub>F</sub> =50mA		1.00	V			
VF	I <sub>F</sub> =150mA		1.25	V			
CJ	V <sub>R</sub> =0, f=1.0MHz		2.0	pF			
t <sub>rr</sub>	$I_F=I_R=10$ mA, $I_{rr}=1.0$ mA, $R_L=100\Omega$		6.0	ns			
$Q_S$	$I_F$ =10mA, $V_R$ =5.0V, $R_L$ =500 $\Omega$		45	рС			
$V_{FR}$	I <sub>F</sub> =10mA, t <sub>r</sub> =20ns		1.75	V			

# BAS28

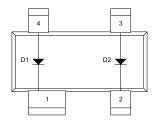
# SURFACE MOUNT SILICON DUAL, ISOLATED HIGH SPEED SWITCHING DIODES



## **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

DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.003	0.008	0.08	0.20			
В	0.006	-	0.15	-			
С	0.000	0.005	0.01	0.13			
D	0.035	0.045	0.89	1.14			
E	0.110	0.120	2.79	3.04			
F	0.075		1.90				
G	0.083	0.102	2.10	2.60			
Н	0.047	0.055	1.19	1.40			
J	0.012	0.020	0.30	0.50			
K	0.030	0.037	0.76	0.93			
L	0.067		1.70				
SOT-1//3 (REV): R3)							

SOT-143 (REV: R3)

R8 (19-September 2018)

## **OUTSTANDING SUPPORT AND SUPERIOR SERVICES**



#### 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

#### **DESIGNER SUPPORT/SERVICES**

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

- Free guick 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

#### 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).

#### **CONTACT US**

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