

BAW100  
BAW100G

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



www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR BAW100 and BAW100G each consist of two electrically isolated high speed silicon switching diodes packaged in an epoxy molded SOT-143 surface mount case. This device is designed for high speed switching applications.

- The BAW100G is **Halogen Free** by design.

**MARKING CODES:**

**BAW100: CJSS**  
**BAW100G: CJSG**



**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

Continuous Reverse Voltage	
Peak Repetitive Reverse Voltage	
Continuous Forward Current	
Peak Repetitive Forward Current	
Peak Forward Surge Current, $t_p=1.0\text{ms}$	
Peak Forward Surge Current, $t_p=1.0\text{ms}$	
Peak Forward Surge Current, $t_p=1.0\text{s}$	
Power Dissipation	
Operating and Storage Junction Temperature	
Thermal Resistance	

SYMBOL		UNITS
$V_R$	75	V
$V_{RRM}$	85	V
$I_F$	250	mA
$I_{FRM}$	500	mA
$I_{FSM}$	4.0	A
$I_{FSM}$	2.0	A
$I_{FSM}$	1.0	A
$P_D$	350	mW
$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
$\theta_{JA}$	357	$^\circ\text{C/W}$

**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

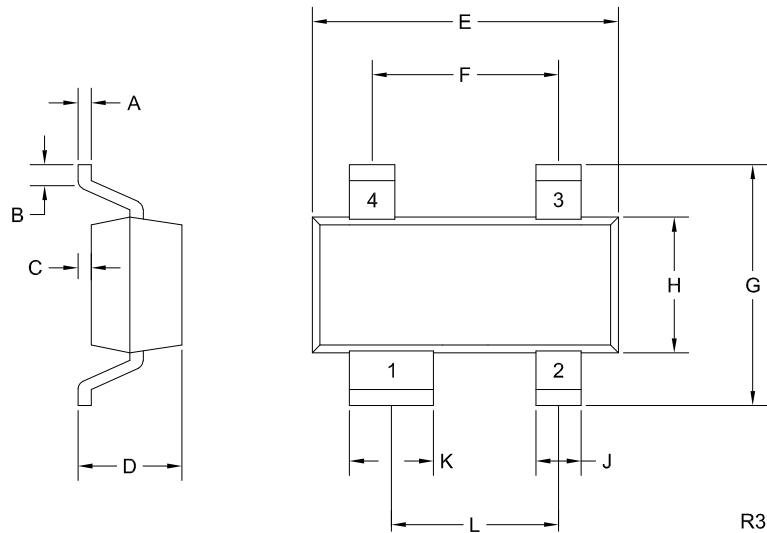
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R=25\text{V}, T_A=150^\circ\text{C}$		30	$\mu\text{A}$
$I_R$	$V_R=75\text{V}$		1.0	$\mu\text{A}$
$I_R$	$V_R=75\text{V}, T_A=150^\circ\text{C}$		50	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	85		V
$V_F$	$I_F=1.0\text{mA}$		715	mV
$V_F$	$I_F=10\text{mA}$		855	mV
$V_F$	$I_F=50\text{mA}$		1.00	V
$V_F$	$I_F=150\text{mA}$		1.25	V
$C_J$	$V_R=0, f=1.0\text{MHz}$		2.0	pF
$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$		6.0	ns

BAW100  
BAW100G

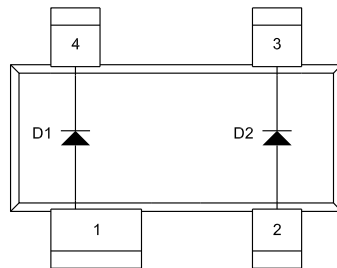
SURFACE MOUNT SILICON  
DUAL, ISOLATED HIGH SPEED  
SWITCHING DIODES



SOT-143 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:

- 1) Anode D1
- 2) Anode D2
- 3) Cathode D2
- 4) Cathode D1

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.008	0.08	0.20
B	0.006	-	0.15	-
C	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
H	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-143 (REV: R3)

MARKING CODES:

- BAW100: CJSS
- BAW100G: CJSG

R5 (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 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

---

### 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

#### Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.  
145 Adams Avenue  
Hauppauge, NY 11788 USA  
Main Tel: (631) 435-1110  
Main Fax: (631) 435-1824  
Support Team Fax: (631) 435-3388  
[www.centrasemi.com](http://www.centrasemi.com)

**Worldwide Field Representatives:**  
[www.centrasemi.com/wwreps](http://www.centrasemi.com/wwreps)

**Worldwide Distributors:**  
[www.centrasemi.com/wwdistributors](http://www.centrasemi.com/wwdistributors)

---

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: [www.centrasemi.com/terms](http://www.centrasemi.com/terms)