

BAW100
BAW100G

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



SOT-143 CASE



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: CJSJ

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

V_R 75
 V_{RRM} 85
 I_F 250
 I_{FRM} 500
 I_{FSM} 4.0
 I_{FSM} 2.0
 I_{FSM} 1.0
 P_D 350
 T_J, T_{stg} -65 to +150
 θ_{JA} 357

UNITS

V
V
mA
mA
A
A
A
mW
 $^{\circ}\text{C}$
 $^{\circ}\text{C/W}$

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

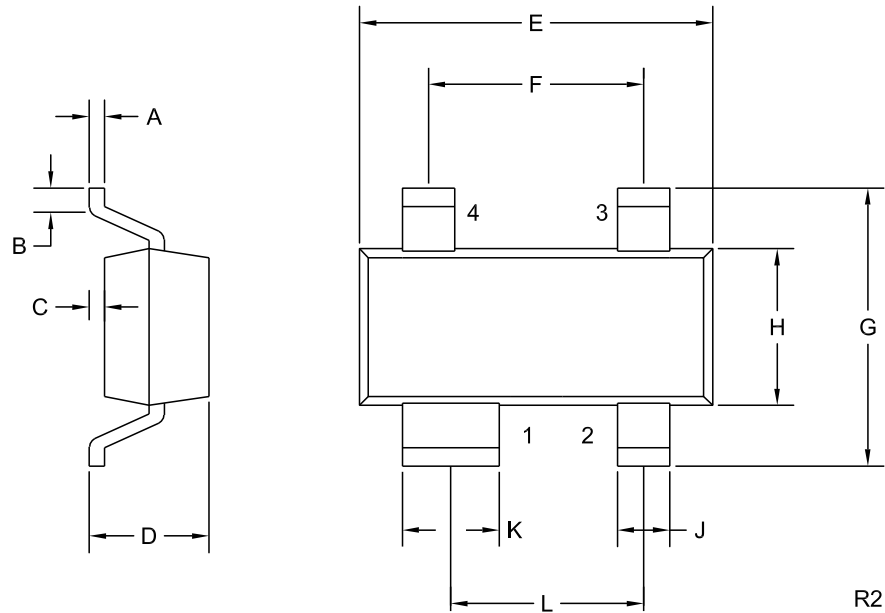
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=25\text{V}, T_A=150^{\circ}\text{C}$		30	μA
I_R	$V_R=75\text{V}$		1.0	μA
I_R	$V_R=75\text{V}, T_A=150^{\circ}\text{C}$		50	μA
BV_R	$I_R=100\mu\text{A}$	85		V
V_F	$I_F=1.0\text{mA}$		715	mV
V_F	$I_F=10\text{mA}$		855	mV
V_F	$I_F=50\text{mA}$		1.00	V
V_F	$I_F=150\text{mA}$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

BAW100
BAW100G

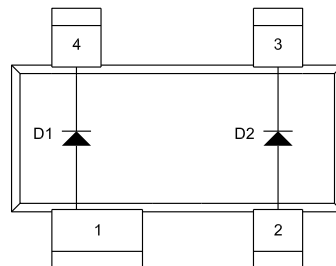
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DUAL, ISOLATED HIGH SPEED
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SOT-143 CASE - MECHANICAL OUTLINE



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	0.006	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)

MARKING CODES:

BAW100: CJSS
BAW100G: CJSG

R4 (20-November 2009)