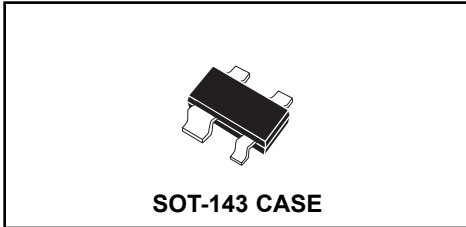


**BAW101**  
**DUAL, ISOLATED HIGH VOLTAGE SWITCHING DIODES**



# Central<sup>TM</sup>

**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR BAW101 type is a Silicon Dual Isolated High Voltage Switching diode designed for surface mount switching applications requiring high voltage capabilities.

**MARKING CODE: CJP**

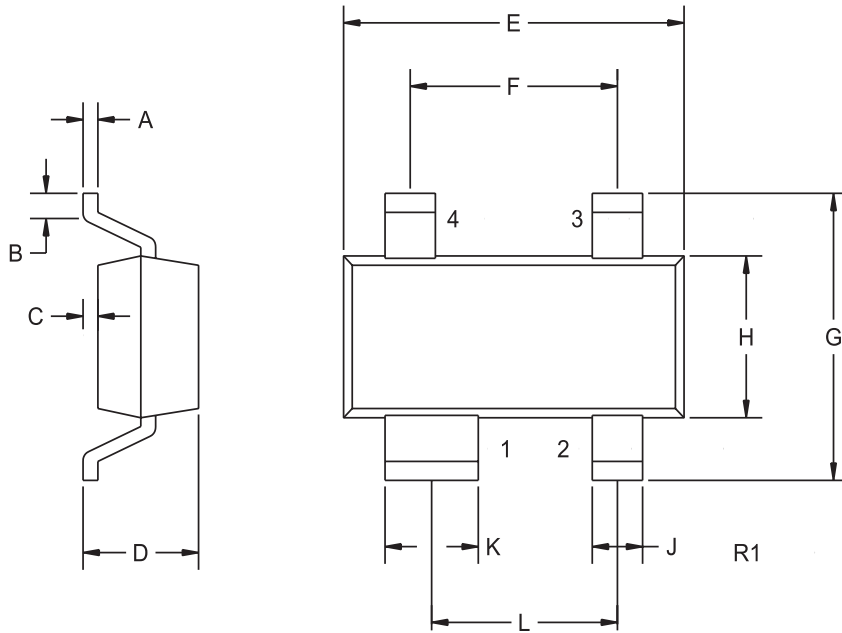
**MAXIMUM RATINGS:** ( $T_A=25^{\circ}\text{C}$ )

	<b>SYMBOL</b>		<b>UNITS</b>
Continuous Reverse Voltage	$V_R$	300	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	300	V
Continuous Forward Current	$I_F$	200	mA
Peak Repetitive Forward Current	$I_{FRM}$	500	mA
Forward Surge Current, $t_p=1 \mu\text{s}$	$I_{FSM}$	4.5	A
Power Dissipation	$P_D$	350	mW
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	$\theta_{JA}$	357	$^{\circ}\text{C/W}$

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
$I_R$	$V_R=250\text{V}$			150	nA
$I_R$	$V_R=250\text{V}, T_A=150^{\circ}\text{C}$			50	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	300			V
$V_F$	$I_F=100\text{mA}$		0.9	1.3	V
$C_T$	$V_R=0\text{V}, f=1.0 \text{ MHz}$			5.0	pF
$t_{rr}$	$I_F=I_R=30\text{mA}, I_{rr}=3.0\text{mA}, R_L=100\Omega$			50	ns

SOT-143 CASE - MECHANICAL OUTLINE



**LEAD CODE:**

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

**MARKING CODE: CJP**

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.005	0.10	0.13
B	0.006	-	0.15	-
C	0.003	0.005	0.08	0.13
D	0.037	0.043	0.94	1.09
E	0.110	0.118	2.79	3.00
F	0.079		2.01	
G	-	0.098	-	2.49
H	0.047	0.051	1.19	1.30
J	0.014	0.018	0.36	0.46
K	0.030	0.033	0.76	0.84
L	0.071		1.80	

SOT-143 (REV: R1)