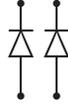
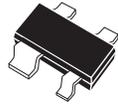


**BAW100****SURFACE MOUNT  
DUAL, ISOLATED HIGH SPEED  
SILICON SWITCHING DIODES****SOT-143 CASE****Central**<sup>TM</sup>  
**Semiconductor Corp.****DESCRIPTION:**

The CENTRAL SEMICONDUCTOR BAW100 consists 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.

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

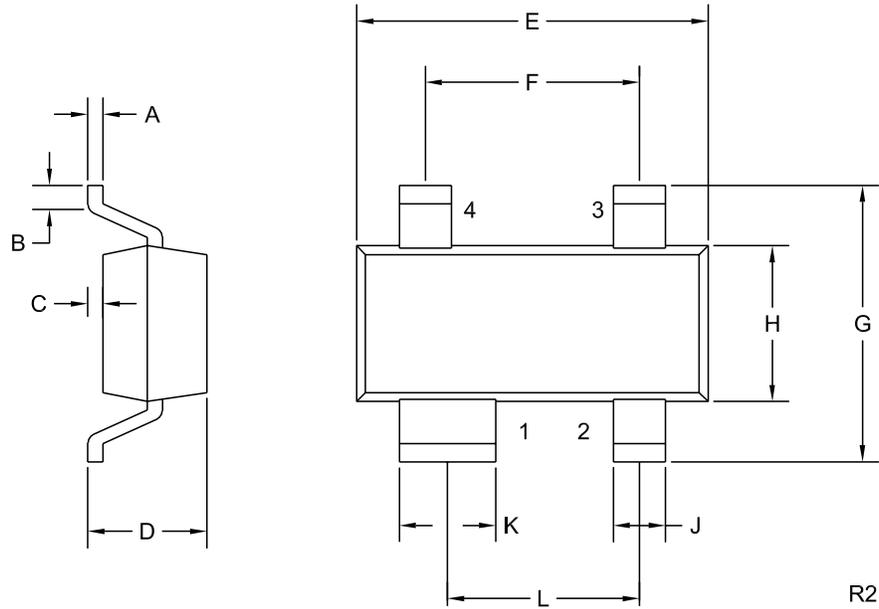
	SYMBOL		UNITS
Continuous Reverse Voltage	$V_R$	75	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	85	V
Continuous Forward Current	$I_F$	250	mA
Peak Repetitive Forward Current	$I_{FRM}$	500	mA
Forward Surge Current, $t_p=1 \mu\text{s}$	$I_{FSM}$	4.0	A
Forward Surge Current, $t_p=1 \text{ms}$	$I_{FSM}$	2.0	A
Forward Surge Current, $t_p=1 \text{s}$	$I_{FSM}$	1.0	A
Power Dissipation	PD	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)

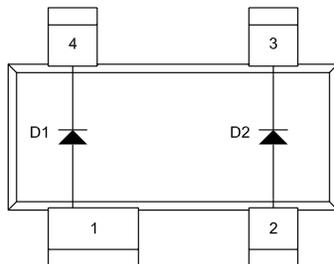
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R=25\text{V}, T_A=150^\circ\text{C}$		30	$\mu\text{A}$
$I_R$	$V_R=75\text{V}$		1.0	$\mu\text{A}$
$I_R$	$V_R=75\text{V}, T_A=150^\circ\text{C}$		50	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	85		V
$V_F$	$I_F=1.0\text{mA}$		715	mV
$V_F$	$I_F=10\text{mA}$		855	mV
$V_F$	$I_F=50\text{mA}$		1.00	V
$V_F$	$I_F=150\text{mA}$		1.25	V
$C_T$	$V_R=0, f=1.0 \text{MHz}$		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

R2 (3-December 2003)

**SOT-143 CASE - MECHANICAL OUTLINE**



R2



**LEAD CODE:**

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

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)

**MARKING CODE: CJSS**