

BAW100
DUAL, ISOLATED HIGH SPEED SWITCHING DIODE



CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR BAW100 is a Dual Isolated High Speed Switching Diode in a SOT-143 surface mount package, designed for high speed switching applications.

Marking code is CJSS.

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

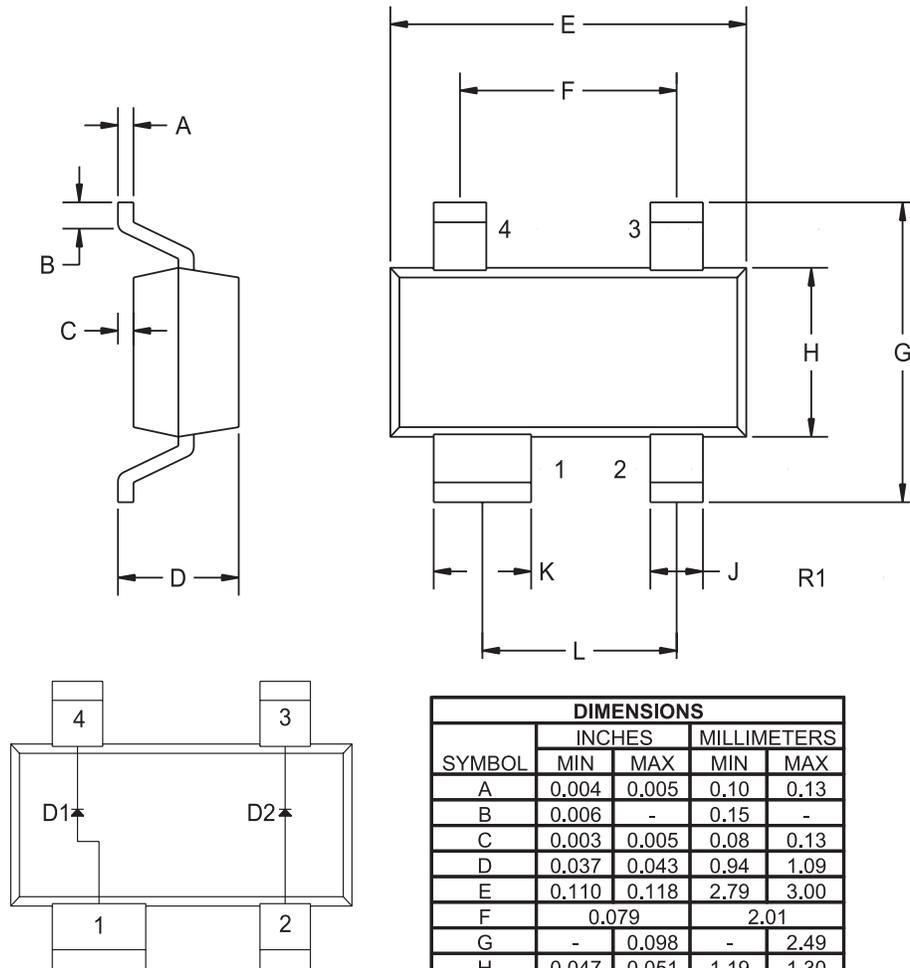
	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RRM}	85	V
Continuous Forward Current	I_F	250	mA
Peak Repetitive Forward Current	I_{FRM}	250	mA
Forward Surge Current, $t_p=1 \mu\text{s}$	I_{FSM}	4000	mA
Forward Surge Current, $t_p=1 \text{ms}$	I_{FSM}	2000	mA
Forward Surge Current, $t_p=1 \text{s}$	I_{FSM}	1000	mA
Power Dissipation	P_D	350	mW
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	θ_{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	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

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SWITCHING DIODE

SOT-143 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS		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)

LEAD CODE:

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

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