

**CMPZ4678 THRU CMPZ4717**

**SURFACE MOUNT  
LOW LEVEL SILICON ZENER DIODE  
1.8 VOLTS THRU 43 VOLTS  
350mW, 5% TOLERANCE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPZ4678 Series silicon zener diode is a high quality voltage regulator designed for applications requiring an extremely low operating current and low leakage.

**MARKING CODE: SEE MARKING CODE ON ELECTRICAL CHARACTERISTICS TABLE**



**SOT-23 CASE**

MAXIMUM RATINGS: (T <sub>A</sub> =25°C unless otherwise noted)	SYMBOL	UNITS
Power Dissipation	P <sub>D</sub>	350 mW
Operating and Storage Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150 °C

**ELECTRICAL CHARACTERISTICS: (T<sub>A</sub>=25°C) V<sub>F</sub>=1.5V MAX @ I<sub>F</sub>=100mA (for all types)**

TYPE	ZENER VOLTAGE			TEST CURRENT I <sub>ZT</sub>	MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT I <sub>ZM</sub>	MARKING CODE
	V <sub>Z</sub> @ I <sub>ZT</sub>				I <sub>R</sub>	@ V <sub>R</sub>		
	MIN V	NOM V	MAX V	μA	μA	V	mA	
CMPZ4678	1.710	1.8	1.890	50	7.5	1.0	120.0	C9A
CMPZ4679	1.900	2.0	2.100	50	5.0	1.0	110.0	C9B
CMPZ4680	2.090	2.2	2.310	50	4.0	1.0	100.0	C9C
CMPZ4681	2.280	2.4	2.520	50	2.0	1.0	95.0	C9D
CMPZ4682	2.565	2.7	2.835	50	1.0	1.0	90.0	C9E
CMPZ4683	2.850	3.0	3.150	50	0.8	1.0	85.0	C9F
CMPZ4684	3.135	3.3	3.465	50	7.5	1.5	80.0	C9G
CMPZ4685	3.420	3.6	3.780	50	7.5	2.0	75.0	C9H
CMPZ4686	3.705	3.9	4.095	50	5.0	2.0	70.0	C9J
CMPZ4687	4.085	4.3	4.515	50	4.0	2.0	65.0	C9K
CMPZ4688	4.465	4.7	4.935	50	10	3.0	60.0	C9L
CMPZ4689	4.845	5.1	5.355	50	10	3.0	55.0	C9M
CMPZ4690	5.320	5.6	5.880	50	10	4.0	50.0	C9N
CMPZ4691	5.890	6.2	6.510	50	10	5.0	45.0	C9P
CMPZ4692	6.460	6.8	7.140	50	10	5.1	35.0	C9Q
CMPZ4693	7.125	7.5	7.875	50	10	5.7	31.8	C9R
CMPZ4694	7.790	8.2	8.610	50	1.0	6.2	29.0	C9S
CMPZ4695	8.265	8.7	9.135	50	1.0	6.6	27.4	C9T
CMPZ4696	8.645	9.1	9.555	50	1.0	6.9	26.2	C9U
CMPZ4697	9.500	10	10.50	50	1.0	7.6	24.8	C9V
CMPZ4698	10.45	11	11.55	50	0.05	8.4	21.6	C9W

**CMPZ4678 THRU CMPZ4717**

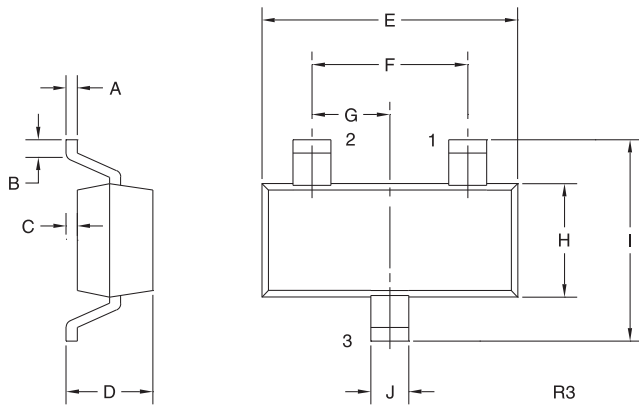
**SURFACE MOUNT**  
**LOW LEVEL SILICON ZENER DIODE**  
**1.8 VOLTS THRU 43 VOLTS**  
**350mW, 5% TOLERANCE**



**ELECTRICAL CHARACTERISTICS - Continued:** ( $T_A=25^\circ\text{C}$ )  $V_F=1.5\text{V MAX @ } I_F=100\text{mA}$  (for all types)

TYPE	ZENER VOLTAGE			TEST CURRENT $I_{ZT}$	MAXIMUM REVERSE CURRENT $I_R @ V_R$		MAXIMUM ZENER CURRENT $I_{ZM}$	MARKING CODE
	$V_Z @ I_{ZT}$				$\mu\text{A}$	$\mu\text{A}$		
	MIN V	NOM V	MAX V					
CMPZ4699	11.40	12	12.60	50	0.05	9.1	20.4	C9X
CMPZ4700	12.35	13	13.65	50	0.05	9.8	19.0	C9Y
CMPZ4701	13.30	14	14.70	50	0.05	10.6	17.5	C9Z
CMPZ4702	14.25	15	15.75	50	0.05	11.4	16.3	91A
CMPZ4703	15.20	16	16.80	50	0.05	12.1	15.4	91B
CMPZ4704	16.15	17	17.85	50	0.05	12.9	14.5	91C
CMPZ4705	17.10	18	18.90	50	0.05	13.6	13.2	91D
CMPZ4706	18.05	19	19.95	50	0.05	14.4	12.5	91E
CMPZ4707	19.00	20	21.00	50	0.01	15.2	11.9	91F
CMPZ4708	20.90	22	23.10	50	0.01	16.7	10.8	91G
CMPZ4709	22.80	24	25.20	50	0.01	18.2	9.9	91H
CMPZ4710	23.75	25	26.25	50	0.01	19.0	9.5	91J
CMPZ4711	25.65	27	28.35	50	0.01	20.4	8.8	91K
CMPZ4712	26.60	28	29.40	50	0.01	21.2	8.5	91L
CMPZ4713	28.50	30	31.50	50	0.01	22.8	7.9	91M
CMPZ4714	31.35	33	34.65	50	0.01	25.0	7.2	91N
CMPZ4715	34.20	36	37.80	50	0.01	27.3	6.6	91P
CMPZ4716	37.05	39	40.95	50	0.01	29.6	6.1	91Q
CMPZ4717	40.85	43	45.15	50	0.01	32.6	5.5	91R

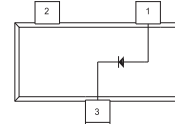
**SOT-23 CASE - MECHANICAL OUTLINE**



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	-	0.075	-	1.90
G	-	0.037	-	0.95
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)

**LEAD CODE:**  
 1) Anode  
 2) No Connection  
 3) Cathode



R9 (13-April 2011)