

**CMPZ4678**  
 THRU  
**CMPZ4717**  
 SURFACE MOUNT  
 350mW LOW LEVEL  
 SILICON ZENER DIODE  
 5% TOLERANCE



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

Power Dissipation  
Operating and Storage Temperature

**Central**<sup>TM</sup>  
**Semiconductor Corp.**

**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: CONSULT FACTORY**

	<b>SYMBOL</b>	<b>UNITS</b>
$P_D$	350	mW
$T_J, T_{stg}$	-65 to +150	°C

**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$ )  $V_F=1.5\text{V MAX}$  @  $I_F=100\text{mA}$  FOR ALL TYPES.

<b>TYPE NO.</b>	<b>NOMINAL ZENER VOLTAGE <math>V_Z</math> @ <math>I_{ZT}</math></b>	<b>TEST CURRENT <math>I_{ZT}</math></b>	<b>MAXIMUM REVERSE LEAKAGE CURRENT <math>I_R</math> @ <math>V_R</math></b>		<b>MAXIMUM VOLTAGE CHANGE** <math>\Delta V_Z</math></b>	<b>MAXIMUM ZENER CURRENT <math>I_{ZM}</math></b>
	<b>VOLTS</b>	<b>μA</b>	<b>μA</b>	<b>VOLTS</b>	<b>VOLTS</b>	<b>mA</b>
CMPZ4678*	1.8	50	7.5	1.0	0.70	120.0
CMPZ4679*	2.0	50	5.0	1.0	0.70	110.0
CMPZ4680*	2.2	50	4.0	1.0	0.75	100.0
CMPZ4681*	2.4	50	2.0	1.0	0.80	95.0
CMPZ4682*	2.7	50	1.0	1.0	0.85	90.0
CMPZ4683*	3.0	50	0.8	1.0	0.90	85.0
CMPZ4684*	3.3	50	7.5	1.5	0.95	80.0
CMPZ4685*	3.6	50	7.5	2.0	0.95	75.0
CMPZ4686*	3.9	50	5.0	2.0	0.97	70.0
CMPZ4687*	4.3	50	4.0	2.0	0.99	65.0
CMPZ4688*	4.7	50	10	3.0	0.99	60.0
CMPZ4689*	5.1	50	10	3.0	0.97	55.0
CMPZ4690*	5.6	50	10	4.0	0.96	50.0
CMPZ4691*	6.2	50	10	5.0	0.95	45.0
CMPZ4692*	6.8	50	10	5.1	0.90	35.0
CMPZ4693*	7.5	50	10	5.7	0.75	31.8
CMPZ4694*	8.2	50	1.0	6.2	0.50	29.0
CMPZ4695*	8.7	50	1.0	6.6	0.10	27.4
CMPZ4696*	9.1	50	1.0	6.9	0.08	26.2
CMPZ4697*	10	50	1.0	7.6	0.10	24.8
CMPZ4698*	11	50	0.05	8.4	0.11	21.6

\* Available on special order only, please consult factory. \*\* $\Delta V_Z = V_Z$  @ 100μA MINUS  $V_Z$  @ 10μA.

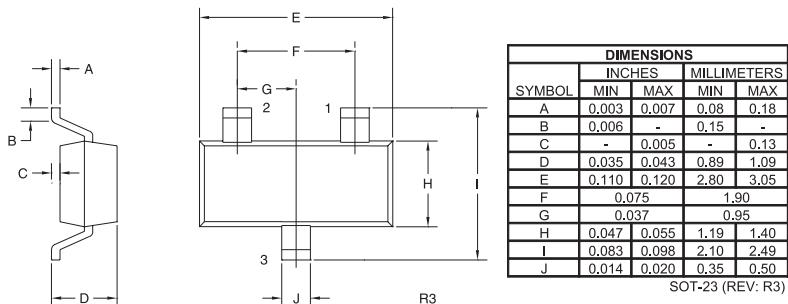
ELECTRICAL CHARACTERISTICS: ( $T_A=25^\circ\text{C}$ )  $V_F=1.5\text{V MAX}$  @  $I_F=100\text{mA}$  FOR ALL TYPES.

TYPE NO.	NOMINAL ZENER VOLTAGE $V_Z$ @ $I_{ZT}$	TEST CURRENT $I_{ZT}$	MAXIMUM REVERSE LEAKAGE CURRENT $I_R$ @ $V_R$		MAXIMUM VOLTAGE CHANGE** $\Delta V_Z$	MAXIMUM ZENER CURRENT $I_{ZM}$
			VOLTS	$\mu\text{A}$	$\mu\text{A}$	VOLTS
CMPZ4699*	12	50	0.05	9.1	0.12	20.4
CMPZ4700*	13	50	0.05	9.8	0.13	19.0
CMPZ4701*	14	50	0.05	10.6	0.14	17.5
CMPZ4702*	15	50	0.05	11.4	0.15	16.3
CMPZ4703*	16	50	0.05	12.1	0.16	15.4
CMPZ4704*	17	50	0.05	12.9	0.17	14.5
CMPZ4705*	18	50	0.05	13.6	0.18	13.2
CMPZ4706*	19	50	0.05	14.4	0.19	12.5
CMPZ4707*	20	50	0.01	15.2	0.20	11.9
CMPZ4708*	22	50	0.01	16.7	0.22	10.8
CMPZ4709*	24	50	0.01	18.2	0.24	9.9
CMPZ4710*	25	50	0.01	19.0	0.25	9.5
CMPZ4711*	27	50	0.01	20.4	0.27	8.8
CMPZ4712*	28	50	0.01	21.2	0.28	8.5
CMPZ4713*	30	50	0.01	22.8	0.30	7.9
CMPZ4714*	33	50	0.01	25.0	0.33	7.2
CMPZ4715*	36	50	0.01	27.3	0.36	6.6
CMPZ4716*	39	50	0.01	29.6	0.39	6.1
CMPZ4717*	43	50	0.01	32.6	0.43	5.5

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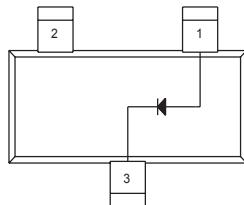
\*\* $\Delta V_Z = V_Z$  @ 100 $\mu\text{A}$  MINUS  $V_Z$  @ 10 $\mu\text{A}$ .

#### SOT-23 CASE - MECHANICAL OUTLINE



**MARKING CODE:**  
CONSULT FACTORY

#### PINOUT



#### **LEAD CODE:**

- 1) ANODE
- 2) NO CONNECTION
- 3) CATHODE