

**CLL4678  
THRU  
CLL4717**

**500mW LOW LEVEL ZENER DIODE  
5% TOLERANCE**



**SOD-80 CASE**

**ABSOLUTE MAXIMUM RATINGS**

Power Dissipation (@  $T_A = 50^\circ\text{C}$ )  
Operating and Storage Temperature

**Central™  
Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR L4678 Series Silicon Zener Diode is a high quality voltage regulator designed for applications requiring an extremely low operating current and low leakage.

**Marking Code: Cathode Band**

**ELECTRICAL CHARACTERISTICS**

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

	<b>SYMBOL</b>		<b>UNITS</b>
$P_D$	500	mW	
$T_{J,TSTG}$	-65 to +200	$^\circ\text{C}$	

<b>Type No.</b>	<b>Nominal Zener Voltage</b>	<b>Test Current</b>	<b>Maximum Reverse Leakage Current</b>		<b>Maximum Voltage Change*</b>	<b>Maximum Zener Current</b>
	$V_Z @ I_{ZT}$	$I_{ZT}$	$I_R @ V_R$	$Volts$	$\Delta V_Z$	$I_{ZM}$
	<b>Volts</b>	<b><math>\mu\text{A}</math></b>	<b><math>\mu\text{A}</math></b>	<b>Volts</b>	<b>Volts</b>	<b>mA</b>
<b>CLL4678</b>	1.8	50	7.5	1.0	0.70	120.0
<b>CLL4679</b>	2.0	50	5.0	1.0	0.70	110.0
<b>CLL4680</b>	2.2	50	4.0	1.0	0.75	100.0
<b>CLL4681</b>	2.4	50	2.0	1.0	0.80	95.0
<b>CLL4682</b>	2.7	50	1.0	1.0	0.85	90.0
<b>CLL4683</b>	3.0	50	0.8	1.0	0.90	85.0
<b>CLL4684</b>	3.3	50	7.5	1.5	0.95	80.0
<b>CLL4685</b>	3.6	50	7.5	2.0	0.95	75.0
<b>CLL4686</b>	3.9	50	5.0	2.0	0.97	70.0
<b>CLL4687</b>	4.3	50	4.0	2.0	0.99	65.0
<b>CLL4688</b>	4.7	50	10	3.0	0.99	60.0
<b>CLL4689</b>	5.1	50	10	3.0	0.97	55.0
<b>CLL4690</b>	5.6	50	10	4.0	0.96	50.0
<b>CLL4691</b>	6.2	50	10	5.0	0.95	45.0
<b>CLL4692</b>	6.8	50	10	5.1	0.90	35.0
<b>CLL4693</b>	7.5	50	10	5.7	0.75	31.8
<b>CLL4694</b>	8.2	50	1.0	6.2	0.50	29.0
<b>CLL4695</b>	8.7	50	1.0	6.6	0.10	27.4
<b>CLL4696</b>	9.1	50	1.0	6.9	0.08	26.2
<b>CLL4697</b>	10	50	1.0	7.6	0.10	24.8
<b>CLL4698</b>	11	50	0.05	8.4	0.11	21.6
<b>CLL4699</b>	12	50	0.05	9.1	0.12	20.4
<b>CLL4700</b>	13	50	0.05	9.8	0.13	19.0
<b>CLL4701</b>	14	50	0.05	10.6	0.14	17.5
<b>CLL4702</b>	15	50	0.05	11.4	0.15	16.3

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

Type No.	Nominal Zener Voltage	Test Current	Maximum Reverse Leakage Current		Maximum Voltage Change*	Maximum Zener Current
			$I_R @ V_R$	$I_ZT$		
	Volts	$\mu A$	$\mu A$	Volts	Volts	mA
<b>CLL4703</b>	16	50	0.05	12.1	0.16	15.4
<b>CLL4704</b>	17	50	0.05	12.9	0.17	14.5
<b>CLL4705</b>	18	50	0.05	13.6	0.18	13.2
<b>CLL4706</b>	19	50	0.05	14.4	0.19	12.5
<b>CLL4707</b>	20	50	0.01	15.2	0.20	11.9
<b>CLL4708</b>	22	50	0.01	16.7	0.22	10.8
<b>CLL4709</b>	24	50	0.01	18.2	0.24	9.9
<b>CLL4710</b>	25	50	0.01	19.0	0.25	9.5
<b>CLL4711</b>	27	50	0.01	20.4	0.27	8.8
<b>CLL4712</b>	28	50	0.01	21.2	0.28	8.5
<b>CLL4713</b>	30	50	0.01	22.8	0.30	7.9
<b>CLL4714</b>	33	50	0.01	25.0	0.33	7.2
<b>CLL4715</b>	36	50	0.01	27.3	0.36	6.6
<b>CLL4716</b>	39	50	0.01	29.6	0.39	6.1
<b>CLL4717</b>	43	50	0.01	32.6	0.43	5.5

All dimensions in inches (mm).

