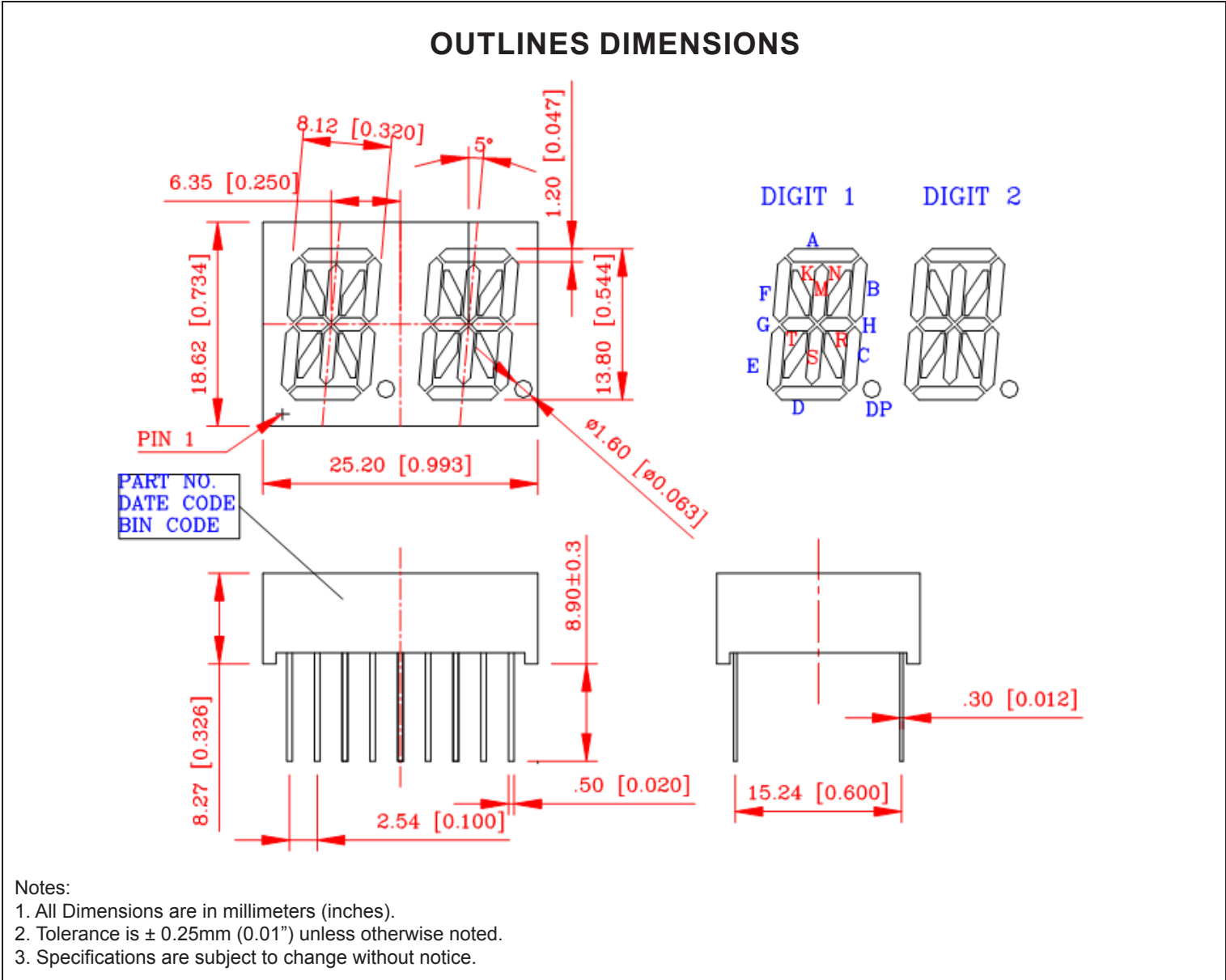


SPECIFICATIONS **CDDAN54R1W-CEE**


Part Number	Chip Material	Color of Emission	Lens Type	Description
CDDAN54R1W-CEE	GaP	Red	White Segment	Common Anode



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

Parameter	Symbol	Max Rating	Unit
Power Dissipation	P _D	355	mW
Input Voltage	V _I	12	V
Supply Voltage	V _{DD}	12	V
Supply Current	I _{DD}	8.5	mA
Operating Temperature Range	T _{OPR}	-25~+60	°C
Storage Temperature Range	T _{STG}	-25~+60	°C
Soldering Condition: 260 °C/ 3sec			

OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	I _V	I _F = 20mA	-	6	-	mcd
Reverse Leakage Current	I _R	V _R = 5V	-	-	10	μA
Peak Wavelength	λ _P	I _F = 20mA	-	632	-	nm
Dominant Wavelength	λ _D	I _F = 20mA	-	622	-	nm
Spectral Radiation Bandwidth	Δλ	I _F = 20mA	-	20	-	nm



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

ELECTRICAL CONNECTION

PIN CONNECTION			
PIN	CONNECTION	PIN	CONNECTION
1	BIT 32 OUTPUT	10	NO PIN
2	BIT 33 OUTPUT	11	NO PIN
3	BIT 34 OUTPUT	12	NO PIN
4	DATA INPUT	13	V _{SS} *1
5	CLOCK INPUT	14	V _{SS} *1
6	DATA ENABLE	15	NO PIN
7	V _{DD}	16	NO PIN
8	V _{LED}	17	BIT 31 OUTPUT
9	BrI CONTROL	18	NO PIN

TABLE 1 SERIAL DATA INPUT SEQUENCE

BIT	DIGIT	SEGMENT	BIT	DIGIT	SEGMENT
1	2	A	18	1	D
2	2	B	19	1	E
3	2	C	20	1	F
4	2	D	21	1	G
5	2	E	22	1	H
6	2	F	23	1	K
7	2	G	24	1	M
8	2	H	25	1	N
9	2	K	26	1	R
10	2	M	27	1	S
11	2	N	28	1	T
12	2	R	29	1	DP
13	2	S	30	2	DP
14	2	T	31		PIN 17
15	1	A	32		PIN 1
16	1	B	33		PIN 2
17	1	C	34		PIN 3



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

RECOMMENDED OPERATION CONDITIONS
(TA=25°C)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Supply Voltage	V_{DD}	4.75		11	V	V
Input Voltage	V_I					
Logical "0" Level		-0.3		0.8	V	A10 μ A Input Bias
Logical "1" Level		2.2		V_{DD}	V	4.75< V_{DD} <5.25V
Logical "2" Level		$V_{DD}-2$		V_{DD}	V	V_{DD} >5.25V
Brightness Input Current	I_B	0		0.75	mA	
Brightness Input Voltage	V_B	3		4.3	V	Input Current=750 μ A
Off State Voltage	$V_{o(off)}$			11	V	
Output Sink Current						
Segment Off				10	μ A	$I_B=0\mu$ A
Segment On			3		mA	$I_B=100\mu$ A
			6		mA	$I_B=200\mu$ A
Input Clock Frequency	F_{CLOCK}	0		0.5	MHZ	
Output Matching	I_o			A20	%	



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

ELECTRICAL DIAGRAM

Internal Block Diagram

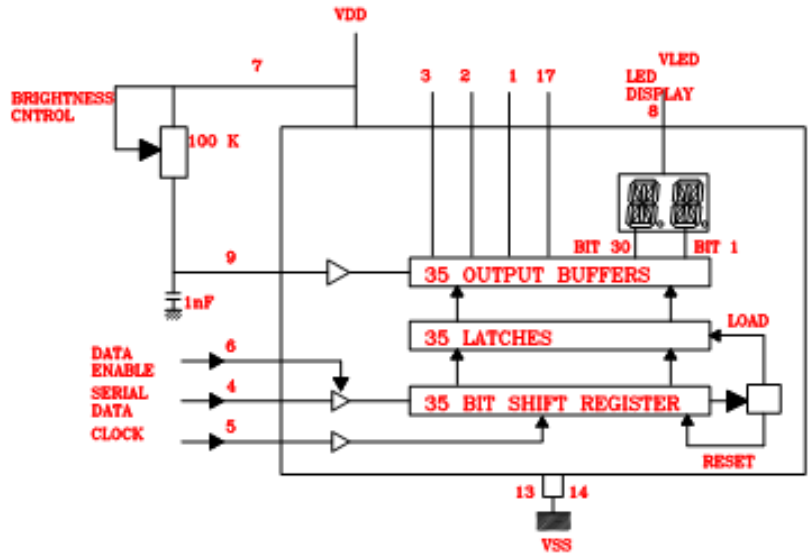


Figure 2

Input Data Format

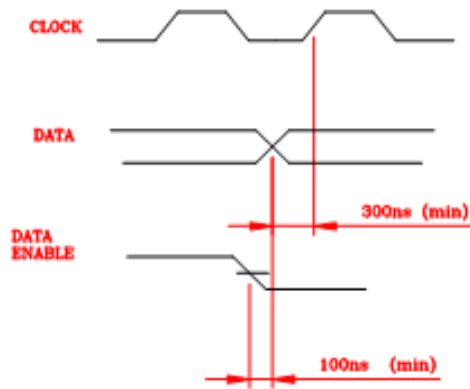


Figure 3

Timing Relationship

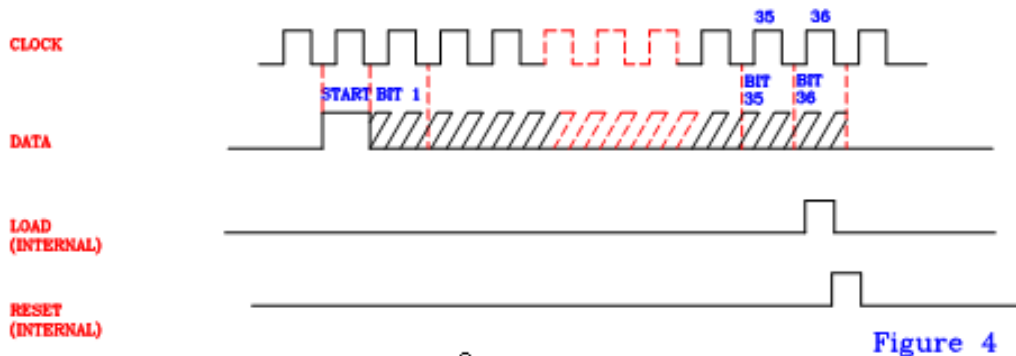


Figure 4



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com