

KLM - 096CA - 16A

This module designed for light emitting display device. Organize with 16 × 16 matrix combination with 256 of DUAL(Red, Green) Chip LEDs, for indoor use.

FEATURES

- Active display size : 96mm × 96mm
- Dot size : $\phi 5$
- Dot pitch : 6mm
- Display color : RED, GREEN, AMBER(Mixed color)
- Duty rate : 1/16
- Dot matrix : 256(16 × 16)
- Weight : 63g(Typ.)

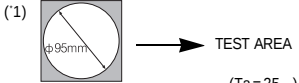
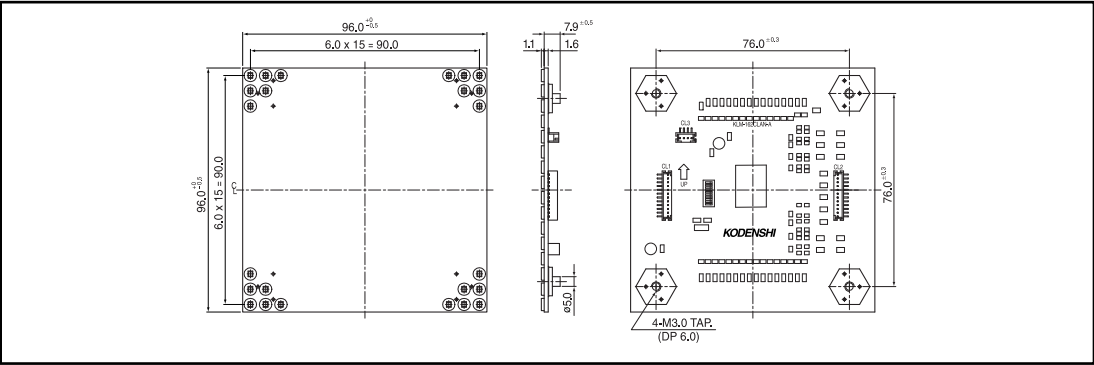
MAXIMUM RATINGS

(Ta=25)

ITEM	SYMBOL	RATINGS	UNIT	COND.
Power dissipation	P_D	18	W	
Supply voltage(DRIVE)	V_{DD}	6	V	
Supply voltage(LED)	V_{LED}	6	V	
Logic input power	V_{in}	- 0.5 ~ V_{DD}	V	
Junction Temp.	T_j	115		
Operating Temp.	T_{opr}	- 20 ~ + 65		
Storage Temp.	T_{stg}	- 20 ~ + 70		

DIMENSIONS

(Unit : mm)



OPTICAL CHARACTERISTICS

(Ta=25)

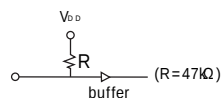
ITEM		SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT.
Bright - ness(16× 16)	GREEN	IV_g	$V_{DD} = 5V$	-	150	-	cd/m^2
	RED	IV_r		-	180	-	
	AMVER	IV_o		-	250	-	
Dot - Balance	GREEN	IVR_g	$V_{LED} = 5V$	-	-	2	-
	RED	IVR_r		-	-	2	
	AMBER	IVR_o		-	-	2	
Emission Wavelength	GREEN	λ_p		-	570	-	nm
	RED	λ_p		-	660	-	
	AMBER	λ_p		-	-	-	
Spectrum half - band	GREEN	λ_g		-	30	-	nm
	RED	λ_r		-	40	-	

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*2. $V_{DD}=5V$, $V_{LED}=5V$ *Temperature condition of guarantee range for operating : $-20 \sim +65$

*PULL UP



CLASSIFICATION		NAME	STANDARD	LENGH	COMPANY	REMARK
POWER CONN.		WAFER	B 4B - PH - SM3 - TB	-	KST	JST C/N
INPUT SOGNAL CONN.		WAFER	B 12B - PH - SM3 - TB	-	KST	JST C/N
OUTPUT SIGNAL CONN.		WAFER	B 12B - PH - SM3 - TB	-	KST	JST C/N
ASS Y	POWER	HARNESS	PHR - 4 - 200S	Option	KST	JST C/N
		HARNESS	PHR - 4 - 200R	Option	KST	JST C/N
		HARNESS	PHR - 12 - 100	Option	KST	JST C/N

The diagram illustrates the internal structure of the BRIGHT CONTROL CIRCUIT. It features a central control block with multiple stages of drivers and resistors. The circuit is powered by a 12V SIGNAL IN and has a 12V SIGNAL OUT. It includes a SCAN DRIVER and a LED DOT MATRIX (16x16). The circuit is connected to a TR ARRAY and a RESISTOR network. A small schematic at the bottom right shows a connection to S.G. and C.

[illegible]

NO	ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT.
1	CLOCK FREQUENCY	f_{cl}	-	-	40	MHz
2	CLOCK CYCLE	$1/f_{cl}$	25	-	-	ns
3	CLOCK - LATCH TIME	$t_{d(C-L)}$	25	-	-	ns
4	LATCH PULSE WIDTH	t_{wst}	25	-	-	ns
5	ENABLE - LATCH TIME	$t_{d(E-L)}$	0	-	-	ns
6	DATA SETUP TIME	t_{sd}	6	-	-	ns
7	DATA HOLD TIME	t_{hd}	6	-	-	ns
8	ADDRESS - ENABLE TIME	$t_{d(A-E)}$	25	-	-	ns
9	LATCH - ADDRESS TIME	$t_{d(L-A)}$	0	-	-	ns
10	LATCH - ENABLE TIME	$t_{d(L-E)}$	0	-	-	ns
11	ON TIME	t_{oc}	-	-	1	ms