



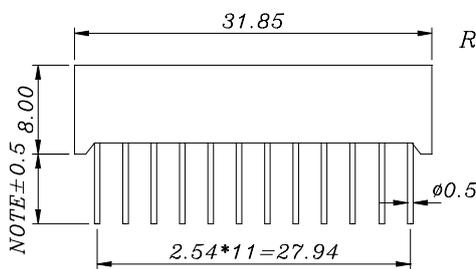
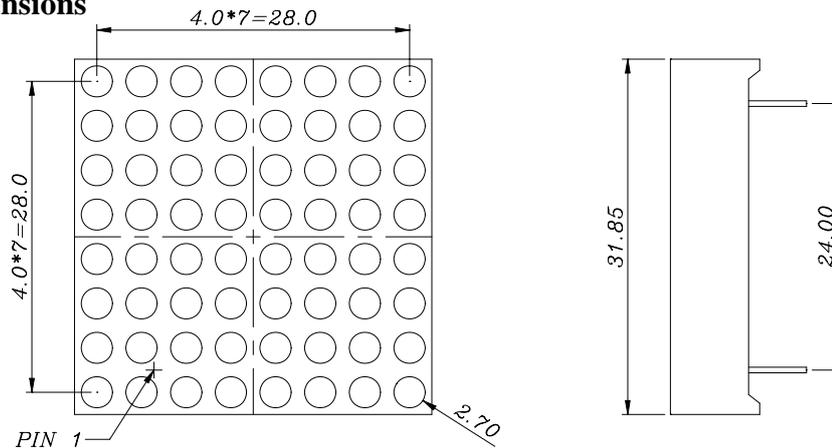
# SHARLIGHT ELECTRONICS CO., LTD.

## SPECIFICATION FOR APPROVAL

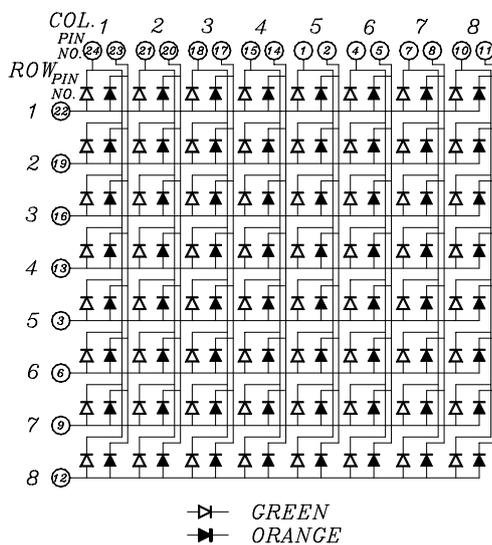
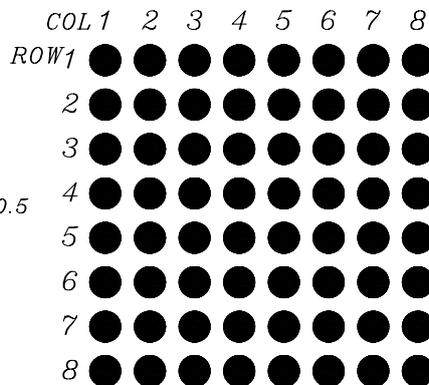
Part No. : CMD-3881320

Page : 1 of 2

### Package Dimensions



NOTE	S	E	T
	2.86	3.4	5.38



1. CATHODE COLUMN 5G
2. CATHODE COLUMN 5
3. ANODE ROW 5
4. CATHODE COLUMN 6G
5. CATHODE COLUMN 6
6. ANODE ROW 6
7. CATHODE COLUMN 7G
8. CATHODE COLUMN 7
9. ANODE ROW 7
10. CATHODE COLUMN 8G
11. CATHODE COLUMN 8
12. ANODE ROW 8
13. ANODE ROW 4
14. CATHODE COLUMN 4
15. CATHODE COLUMN 4G
16. ANODE ROW 3
17. CATHODE COLUMN 3
18. CATHODE COLUMN 3G
19. ANODE ROW 2
20. CATHODE COLUMN 2
21. CATHODE COLUMN 2G
22. ANODE ROW 1
23. CATHODE COLUMN 1
24. CATHODE COLUMN 1G

#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.30\text{mm}(.012\text{'})$  unless otherwise noted.
3. Protruded resin under flange is  $1.0\text{mm}(.04\text{'})$  max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.



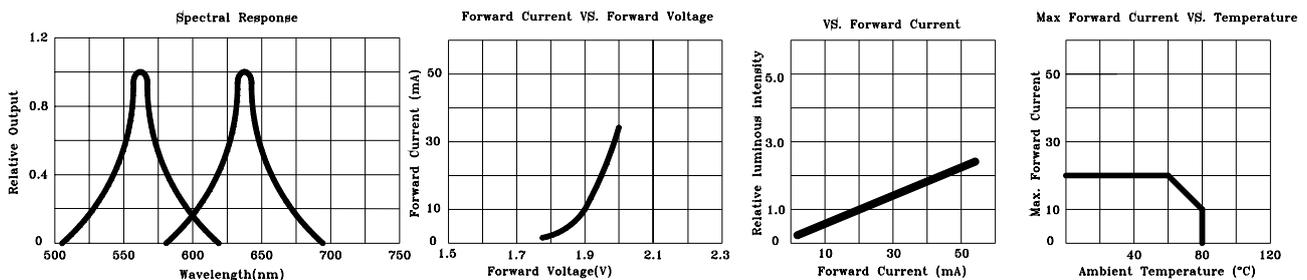
**Electrical / Optical Characteristics at TA=25°C**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Average Luminous Intensity	(O)I <sub>V</sub>	1	5		mcd	IF = 20mA
	(G)I <sub>V</sub>	5	10		mcd	IF = 20mA
Peak Emission Wavelength	(O)λ <sub>p</sub>		639		nm	IF = 20mA
	(G)λ <sub>p</sub>		565		nm	IF = 20mA
Dominant Wavelength	(O)λ <sub>d</sub>	620	631	636	nm	IF = 20mA
	(G)λ <sub>d</sub>	565	569	576	nm	IF = 20mA
Spectral Line Half-Width	(O)Δλ		20		nm	IF = 20mA
	(G)Δλ		30		nm	IF = 20mA
Forward Voltage	(O)V <sub>F</sub>		1.9	2.4	V	IF = 20mA
	(G)V <sub>F</sub>		2.1	2.6		
Reverse Current	I <sub>R</sub>			100	μA	VR = 5V
Luminous Intensity Matching Ratio	Iv-m			2:1		IF = 20mA

**Absolute Maximum Ratings at TA=25°C**

Parameter	Maximum Rating	Unit
Average Power Dissipation Per Dot	O	24
	G	26
Peak Forward Current Per Dot (1/10 Duty Cycle, 0.1ms Pulse Width)	O	100
	G	100
Continuous Forward Current	O	10
	G	10
Reverse Voltage	5	V
Operating Temperature Range	-20°C to +80°C	
Storage Temperature Range	-55°C to +100°C	
Lead Soldering Temperature [4.0mm(.157") From Body]	260°C for 5 Seconds	
Reflow Soldering	NO	

TYPICAL ELECTRON-OPTICAL CHARACTERISTIC CURVES  
25°C Free Air Temperature Unless Otherwise Specified





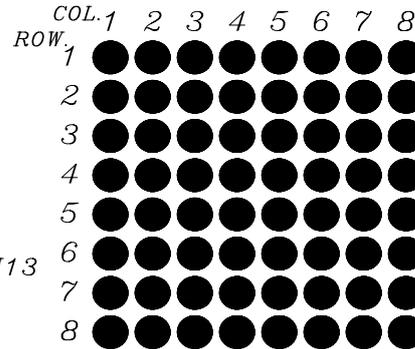
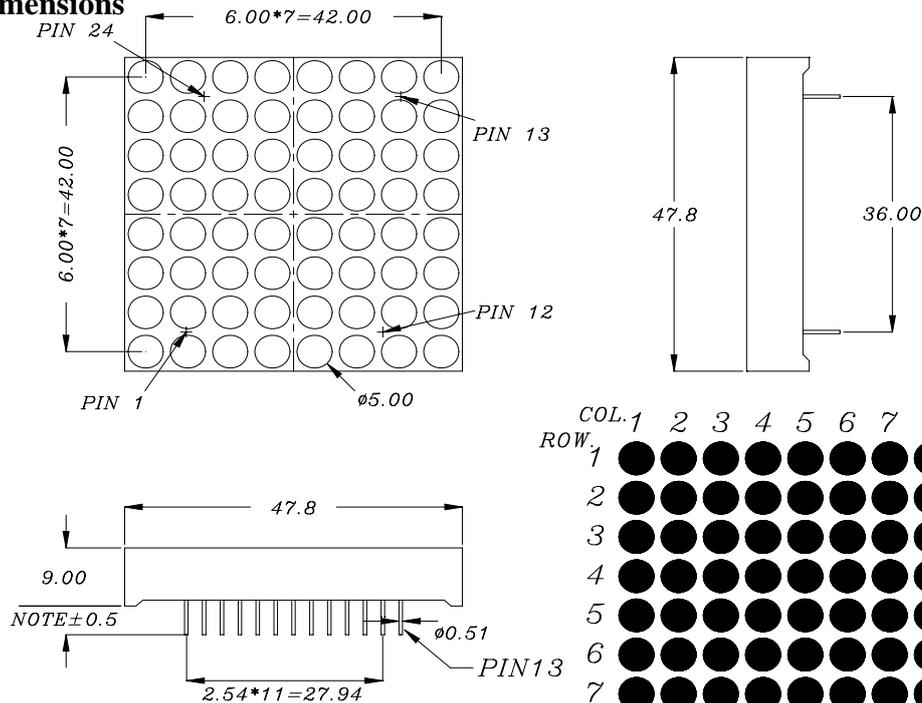
# SHARLIGHT ELECTRONICS CO., LTD.

## SPECIFICATION FOR APPROVAL

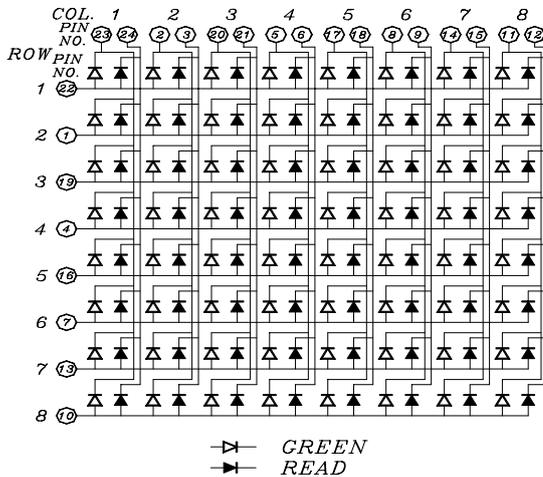
Part No. : CMD-5881KNC

Page : 1 of 2

### Package Dimensions



NOTE	S	E	T
	1.76	2.3	4.28



1. ANODE ROW 2
2. CATHODE COLUMN 2G
3. CATHODE COLUMN 2
4. ANODE ROW 4
5. CATHODE COLUMN 4G
6. CATHODE COLUMN 4
7. ANODE ROW 6
8. CATHODE COLUMN 6G
9. CATHODE COLUMN 6
10. ANODE ROW 8
11. CATHODE COLUMN 8G
12. CATHODE COLUMN 8
13. ANODE ROW 7
14. CATHODE COLUMN 7G
15. CATHODE COLUMN 7
16. ANODE ROW 5
17. CATHODE COLUMN 5G
18. CATHODE COLUMN 5
19. ANODE ROW 3
20. CATHODE COLUMN 3G
21. CATHODE COLUMN 3
22. ANODE ROW 1
23. CATHODE COLUMN 1G
24. CATHODE COLUMN 1

### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.30\text{mm}(.012\text{'})$  unless otherwise noted.
3. Protruded resin under flange is  $1.0\text{mm}(.04\text{'})$  max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.



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## SPECIFICATION FOR APPROVAL

Part No. : CMD-5881KNC

Page : 2 of 2

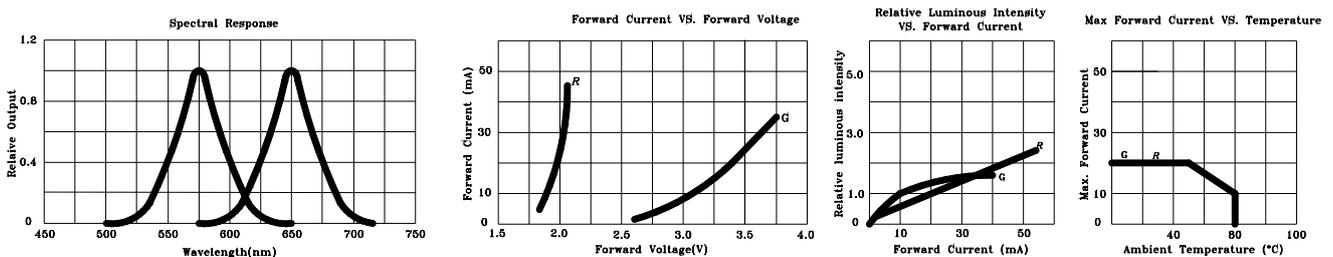
### Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Average Luminous Intensity	IV(R)	10	15		mcd	IF = 20mA
	IV(G)	10	18			
Peak Emission Wavelength	$\lambda P(R)$		660		nm	IF = 20mA
	$\lambda P(G)$		565			
Dominant Wavelength	$\lambda d(R)$	635	639	650	nm	IF = 20mA
	$\lambda d(G)$	565	569	576		
Spectral Line Half-Width	$\Delta \lambda (R)$		20		nm	IF = 20mA
	$\Delta \lambda (G)$		30			
Forward Voltage	VF(R)		1.9	2.4	V	IF = 20mA
	VF(G)		2.1	2.6		
Reverse Current	IR			100	$\mu A$	VR = 5V

### Absolute Maximum Ratings at TA=25°C

Parameter	Maximum Rating	Unit
Power Dissipation	40	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	90	mA
Continuous Forward Current	15	mA
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-20°C to + 80°C	
Storage Temperature Range	-55°C to + 100°C	
Lead Soldering Temperature [4mm(.157") From Body]	260°C for 5 Seconds	
Reflow Soldering	NO	

### TYPICAL ELECTRON-OPTICAL CHARACTERISTIC CURVES 25°C Free Air Temperature Unless Otherwise Specified



LISTER : 曾聖文 12-16-09

EDITOR : 周素華 12-16-09

DATE : 12-16-09

REV : A