

LED Bulb Electrical-Optical Characteristics

Test Equipment:

1. Power Lumen test system
2. Central Intensity Viewing Angle tes

Test Temperature 25°
Sampling 1PC

Specification	Color	Test Voltage V	Power W	Lumen lm	Viewing Angle °	Central Intensity LUX
GU10 15LEDs 240V	<i>yellow</i>	240,4	1,9	10,4	100	13
	<i>green</i>	240	1,9	20,3	350	15
	<i>blue</i>	240,2	2,0	5,0	300	14
	<i>red</i>	240	2,0	8,0	100	13
	<i>white</i>	240,1	2,0	30,2	600	14

Specification	Color	Test Voltage V	Power W	Lumen lm	Viewing Angle °	Central Intensity LUX
MR16 15LEDs 12V GX5.3	<i>white</i>	12,1	1,8	26,2	500	15
	<i>green</i>	12,2	2,0	16,5	450	14
	<i>blue</i>	12,1	2,0	3,6	400	14
	<i>red</i>	12,1	2,0	7,5	100	13
	<i>yellow</i>	12	1,9	10,1	100	13

YI KAIS INTERNATIONAL CO.,LTD

SPECIFICATION FOR APPROVAL

CUSTOMER

DIRECTOR

SPEC NO.

04YK-YU100A

PART NO.

YU-100A

SALE

DATE

APPROVED SIGNATURES

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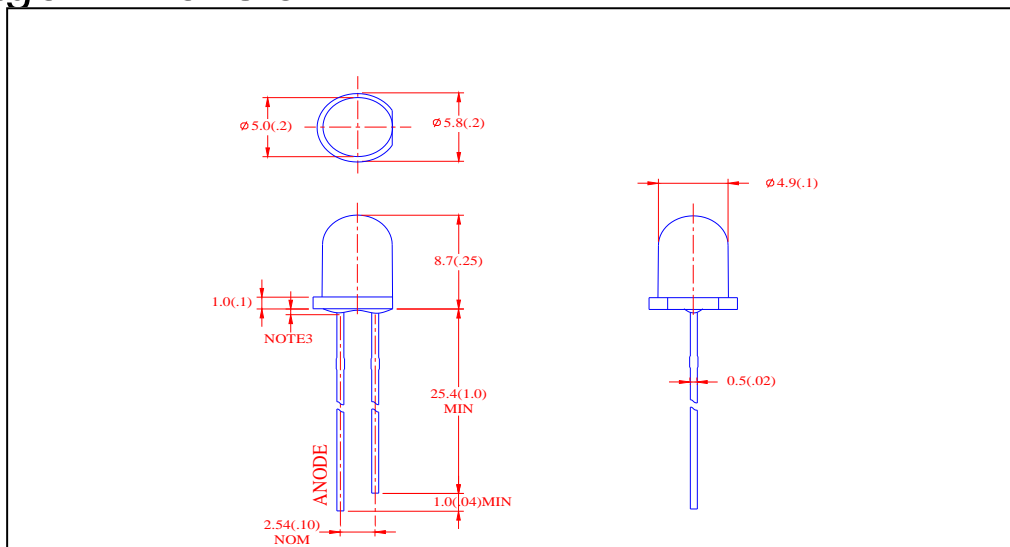
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YI KAIS INTERNATIONAL CO.,LTD

Features

- * High intensity
- * Standard T-1 3/4 diameter package
- * Wide viewing angle
- * General purpose leads
- * Reliable and rugged

Package Dimension



PART NO.	Lens Color	Source Color
YU-100A	Water Clear	WHITE

Notes:

- 1.All dimensions are in millimeters.
- 2.Tolerance is ± 0.25 mm unless otherwise noted.
- 3.Protruded resin under flange is 1.0mm max.
- 4.Lead spacing is measured where the leads emerge from the package.
- 5.Specifications are subject to change without notice.
- 6.This data-sheet only valid for six months.

YI KAIS INTERNATIONAL CO.,LTD

Absolute Maximum Ratings at Ta=25℃

Parameter	Max.	Unit
Power Dissipation	100	mW
Peak Forward Current	50	mA
Reverse Voltage	5	V
Continuous Forward Current	20	mA
Operation Temperature Range	-40℃ to +85℃	
Storage Temperature Range	-40℃ to +85℃	
Lead Soldering Temperature(1.6mm From Body)	260℃ for 5 Seconds	

*Duty 1/10 Pulse Width 0.1ms

▲ This Rating is Zener Diode

Electrical Optical Characteris at Ta=25℃

Parameter	Symbol	MIN.	TYP.	MAX.	UNIT	CONDITION
Luminous	Iv	9000	~	12000	mcd	If=20mA(1)
Viewing Angle	20	~	20	~	Deg	(Note 2)
Dominant Wavelength	λ_d	460	~	465	nm	If=20mA(3)
Spectrum Line Half-Width	$\Delta\lambda$		30		nm	If=20mA
Forward Voltage	Vf	3.0	~	3.6	V	If=20mA
Reverse Current	Ir	~	~	50	μA	Vr=5V

Axial Direction(Luminous Intensity)

Products are sorted by wavelength,which cannot specified by customer.

YI KAIS INTERNATIONAL CO.,LTD

SPECIFICATION FOR APPROVAL

CUSTOMER

DIRECTOR

SPEC NO.

04YK-QH513BC-C

PART NO.

QH513BC-C

SALE

DATE

APPROVED SIGN-ATURES

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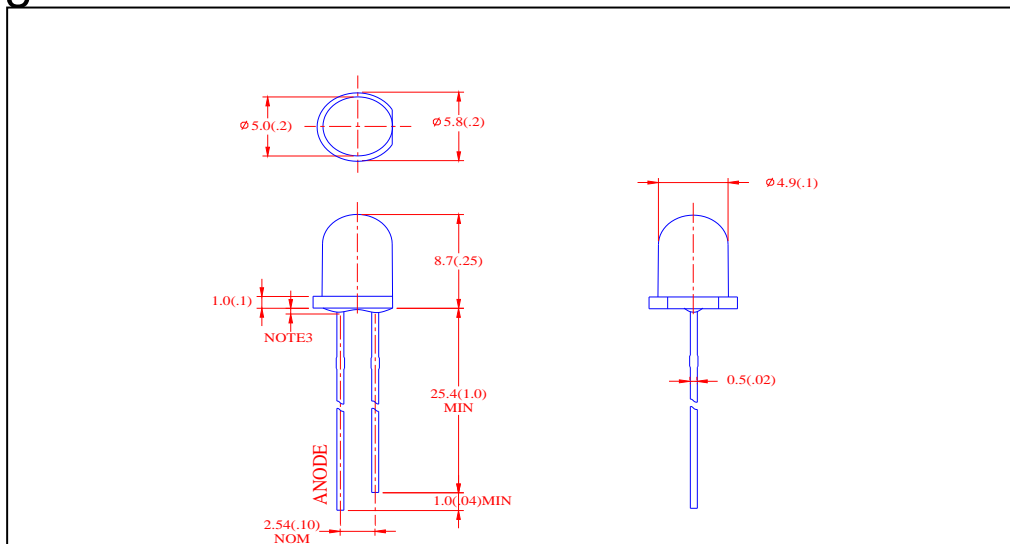
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YI KAIS INTERNATIONAL CO.,LTD

Features

- * High intensity
- * Standard T-1 3/4 diameter package
- * Wide viewing angle
- * General purpose leads
- * Reliable and rugged

Package Dimension



PART NO.	Lens Color	Source Color
QH513BC-C	Water Clear	BLUE

Notes:

- 1.All dimensions are in millimeters.
- 2.Tolerance is ± 0.25 mm unless otherwise noted.
- 3.Protruded resin under flange is 1.0mm 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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YI KAIS INTERNATIONAL CO.,LTD

Absolute Maximum Ratings at Ta=25□

Parameter	Max.	Unit
Power Dissipation	100	mW
Peak Forward Current	50	mA
Reverse Voltage	5	V
Continuous Forward Current	20	mA
Operation Temperature Range	-40 to +85	
Storage Temperature Range	-40□ to +85□	
Lead Soldering Temperature(1.6mm From Body)	260 for 5 Seconds	

*Duty 1/10 Pulse Width 0.1ms

▲ This Rating is Zener Diode

Electrical Optical Characteris at Ta=25□

Parameter	Symbol	MIN.	TYP.	MAX.	UNIT	CONDITION
Luminous	Iv	4000	~	5000	mcd	If=20mA(1)
Viewing Angle	2θ	~	20	~	Deg	(Note 2)
Dominant Wavelength	λd	465	~	470	nm	If=20mA(3)
Spectrum Line Half-Width	λ		30		nm	If=20mA
Forward Voltage	Vf	2.8	~	3.5	V	If=20mA
Reverse Current	Ir	~	~	10	μA	Vr=5V

Axial Direction(Luminous Intensity)

Products are sorted by wavelength,which cannot specified by customer.

YI KAIS INTERNATIONAL CO.,LTD

SPECIFICATION FOR APPROVAL

CUSTOMER

DIRECTOR

SPEC NO.

04YK-QH513UYC-F

PART NO.

QH513UYC-F

SALE

DATE

APPROVED SIGN-ATURES

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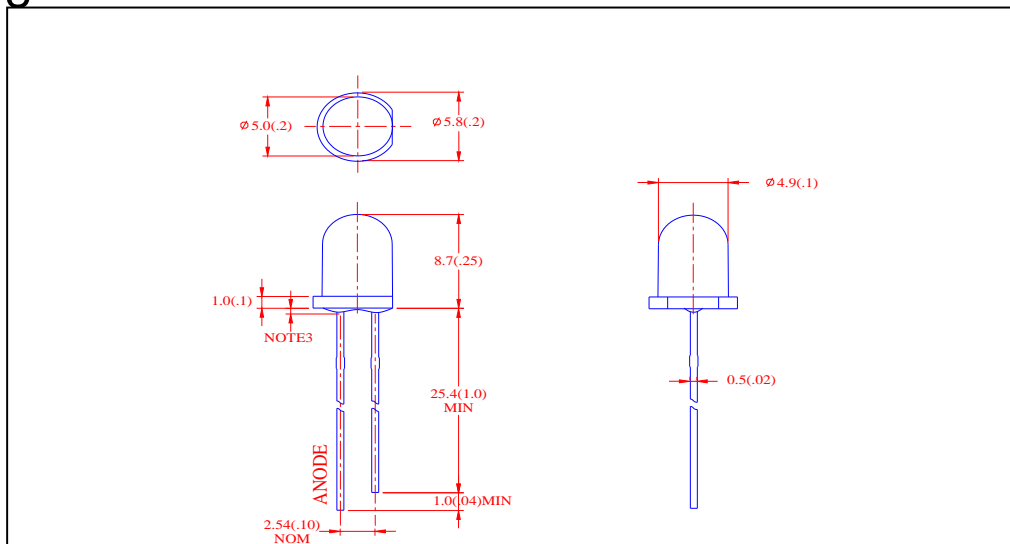
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YI KAIS INTERNATIONAL CO.,LTD

Features

- * High intensity
- * Standard T-1 3/4 diameter package
- * Wide viewing angle
- * General purpose leads
- * Reliable and rugged

Package Dimension



PART NO.	Lens Color	Source Color
QH513UYC-F	Water Clear	YELLOW

Notes:

- 1.All dimensions are in millimeters.
- 2.Tolerance is ± 0.25 mm unless otherwise noted.
- 3.Protruded resin under flange is 1.0mm 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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YI KAIS INTERNATIONAL CO.,LTD

Absolute Maximum Ratings at Ta=25□

Parameter	Max.	Unit
Power Dissipation	110	mW
Peak Forward Current	50	mA
Reverse Voltage	5	V
Continuous Forward Current	20	mA
Operation Temperature Range	-40 to +85	
Storage Temperature Range	-40 to +85	
Lead Soldering Temperature(1.6mm From Body)	260 for 5 Seconds	

*Duty 1/10 Pulse Width 0.1ms

▲ This Rating is Zener Diode

Electrical Optical Characteris at Ta=25□

Parameter	Symbol	MIN.	TYP.	MAX.	UNIT	CONDITION
Luminous	Iv	4000	~	5000	mcd	If=20mA(1)
Viewing Angle	2θ	~	20	~	Deg	(Note 2)
Dominant Wavelength	λd	585	~	590	nm	If=20mA(3)
Spectrum Line Half-Width	□λ		30		nm	If=20mA
Forward Voltage	Vf	1.9	~	2.3	V	If=20mA
Reverse Current	Ir	~	~	10	μA	Vr=5V

Axial Direction(Luminous Intensity)

Products are sorted by wavelength,which cannot specified by customer.

YI KAIS INTERNATIONAL CO.,LTD

SPECIFICATION FOR APPROVAL

CUSTOMER

DIRECTOR

SPEC NO.

04YK-QH513PGC-A

PART NO.

QH513PGC-A

SALE

DATE

APPROVED SIGNATURES

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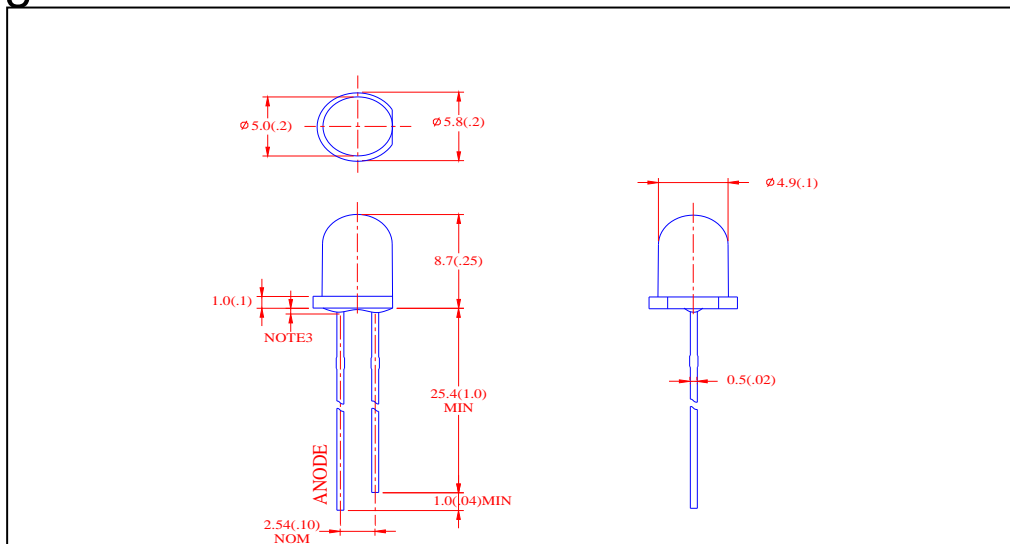
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YI KAIS INTERNATIONAL CO.,LTD

Features

- * High intensity
- * Standard T-1 3/4 diameter package
- * Wide viewing angle
- * General purpose leads
- * Reliable and rugged

Package Dimension



PART NO.	Lens Color	Source Color
QH513PGC-A	Water Clear	GREEN

Notes:

- 1.All dimensions are in millimeters.
- 2.Tolerance is ± 0.25 mm unless otherwise noted.
- 3.Protruded resin under flange is 1.0mm max.
- 4.Lead spacing is measured where the leads emerge from the package.
- 5.Specifications are subject to change without notice.
- 6.This data-sheet only valid for six months.

YI KAIS INTERNATIONAL CO.,LTD

Absolute Maximum Ratings at Ta=25□

Parameter	Max.	Unit
Power Dissipation	100	mW
Peak Forward Current	50	mA
Reverse Voltage	5	V
Continuous Forward Current	20	mA
Operation Temperature Range	-40 to +85	
Storage Temperature Range	-40 to +85	
Lead Soldering Temperature(1.6mm From Body)	260 for 5 Seconds	

*Duty 1/10 Pulse Width 0.1ms

▲ This Rating is Zener Diode

Electrical Optical Characteris at Ta=25□

Parameter	Symbol	MIN.	TYP.	MAX.	UNIT	CONDITION
Luminous	Iv	10000	~	13000	mcd	If=20mA(1)
Viewing Angle	2θ	~	20	~	Deg	(Note 2)
Dominant Wavelength	λd	520	~	525	nm	If=20mA(3)
Spectrum Line Half-Width	λ		30		nm	If=20mA
Forward Voltage	Vf	2.8	~	3.5	V	If=20mA
Reverse Current	Ir	~	~	10	μA	Vr=5V

Axial Direction(Luminous Intensity)

Products are sorted by wavelength,which cannot specified by customer.

YI KAIS INTERNATIONAL CO.,LTD

SPECIFICATION FOR APPROVAL

CUSTOMER

DIRECTOR

SPEC NO.

04YK-QH513URC-E

PART NO.

QH513URC-E

SALE

DATE

APPROVED SIGN-ATURES

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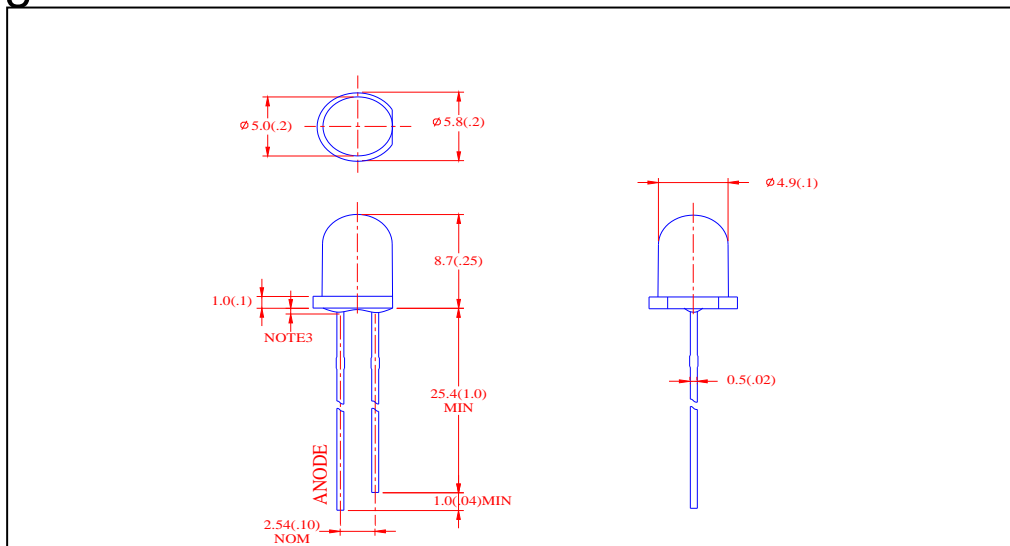
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YI KAIS INTERNATIONAL CO.,LTD

Features

- * High intensity
- * Standard T-1 3/4 diameter package
- * Wide viewing angle
- * General purpose leads
- * Reliable and rugged

Package Dimension



PART NO.	Lens Color	Source Color
QH513URC-E	Water Clear	RED

Notes:

- 1.All dimensions are in millimeters.
- 2.Tolerance is ± 0.25 mm unless otherwise noted.
- 3.Protruded resin under flange is 1.0mm max.
- 4.Lead spacing is measured where the leads emerge from the package.
- 5.Specifications are subject to change without notice.
- 6.This data-sheet only valid for six months.

YI KAIS INTERNATIONAL CO.,LTD

Absolute Maximum Ratings at Ta=25□

Parameter	Max.	Unit
Power Dissipation	110	mW
Peak Forward Current	50	mA
Reverse Voltage	5	V
Continuous Forward Current	20	mA
Operation Temperature Range	-40 to +85	
Storage Temperature Range	-40 to +85	
Lead Soldering Temperature(1.6mm From Body)	260 for 5 Seconds	

*Duty 1/10 Pulse Width 0.1ms

▲ This Rating is Zener Diode

Electrical Optical Characteris at Ta=25□

Parameter	Symbol	MIN.	TYP.	MAX.	UNIT	CONDITION
Luminous	Iv	4000	~	5000	mcd	If=20mA(1)
Viewing Angle	2θ	~	20	~	Deg	(Note 2)
Dominant Wavelength	λd	620	~	630	nm	If=20mA(3)
Spectrum Line Half-Width	λ		30		nm	If=20mA
Forward Voltage	Vf	1.9	~	2.3	V	If=20mA
Reverse Current	Ir	~	~	10	μA	Vr=5V

Axial Direction(Luminous Intensity)

Products are sorted by wavelength,which cannot specified by customer.