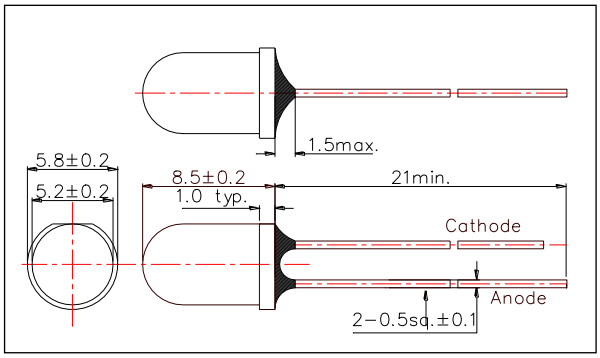
L625-02
Super Bright Red LED Lamp

L625-02 is an AlInGaP LED mounted on a lead frame with a clear epoxy lens.
On forward bias, it emits a bspecial band of radiation, which peaks at 625nm.

<Specifications>

1. Product Name: Red LED Lamp
2. Type Number: L625-02
3. Chip:
   - Chip material: AlGaInP
   - Peak Wavelength: 625nm typ.
4. Package
   - Type: Φ5mm clear molding
   - Resin Material: Epoxy Resin
   - Lead Frame: Soldered(Lead Free)

Outer Dimension (Unit:mm)



Absolute Maximum Ratings [Ta=25℃]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	120	mW
Forward Current	IF	50	mA
Pulse Forward Current*	IFP	100	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthja	300	K/W
Junction Temperature	Tj	120	℃
Operating Temperature	TOPR	-40 ~ +100	℃
Storage Temperature	TSTG	-40 ~ +100	℃
Soldering Temperature**	TSOL	250	℃

* Duty=1% and Pulse Width=10μs.
** Soldering condition must be completed within 5 second at 250 ℃.

RoHS Compliant

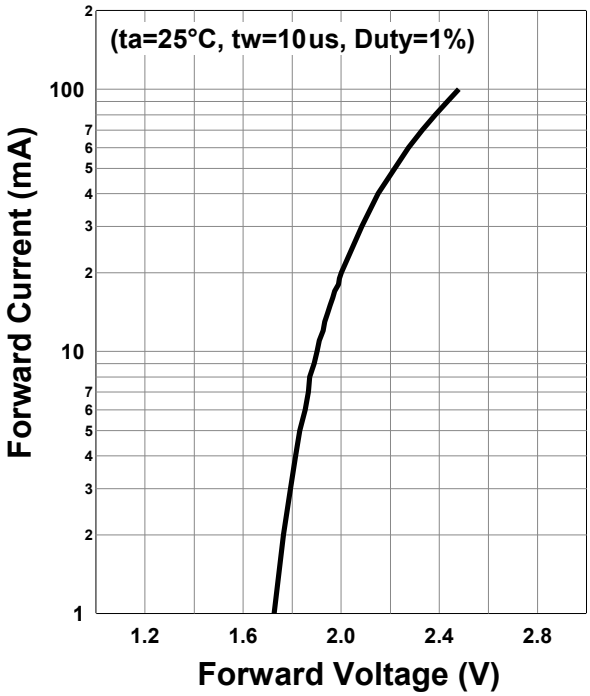
Marubeni America Corporation | 3945 Freedom Circle, Suite 1000, Santa Clara, CA95054
Tel: 408-330-0650 | Fax: 408-330-0655 | Email: sales@tech-led.com

Electro-Optical Characteristics [Ta=25℃ typ.]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=20mA		2.0	2.3	V
		IF=50mA		2.2		
	VFP	IFP=100mA		2.5		
Radiated Power*	PO	IF=20mA	5.0	9.0		mW
		IF=50mA		23		
		IFP=100mA		44		
Radiant Intensity**	IE	IF=20mA		160		mW/sr
		IF=50mA		410		
		IFP=100mA		795		
Brightness	IV	IF=20mA		40000		mcd
Luminous Flux	ΦV	IF=20mA		3.1		lm
Peak Wavelength	λP	IF=20mA	615	625	635	nm
Dominant Wavelength	λD	IF=20mA		(617)		nm
Half Width	Δλ	IF=20mA		16		nm
Viewing Half Angle	θ1/2	IF=20mA		±3		Deg.
Rise Time	tr	IF=20mA		70		ns
Fall Time	tr	IF=20mA		50		ns

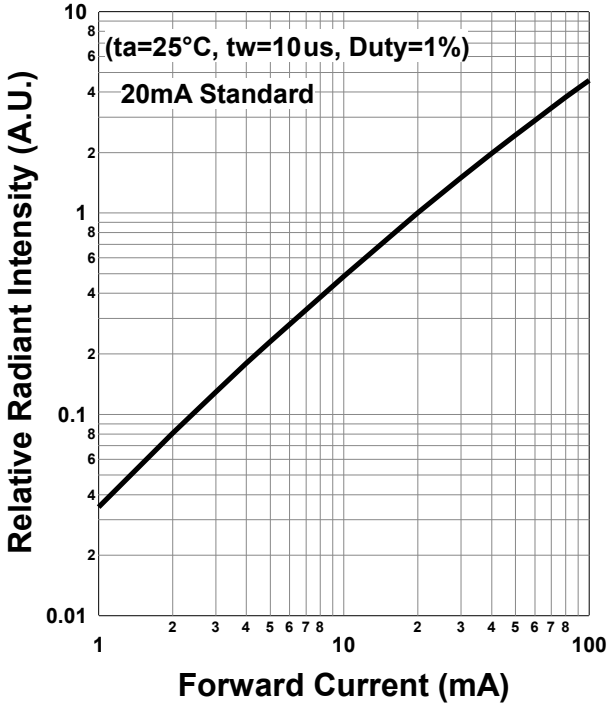
* Measured by S3584-08
** Measured by CIE127-2007 Condition B.

Marubeni America Corporation | 3945 Freedom Circle, Suite 1000, Santa Clara, CA95054
Tel: 408-330-0650 | Fax: 408-330-0655 | Email: sales@tech-led.com

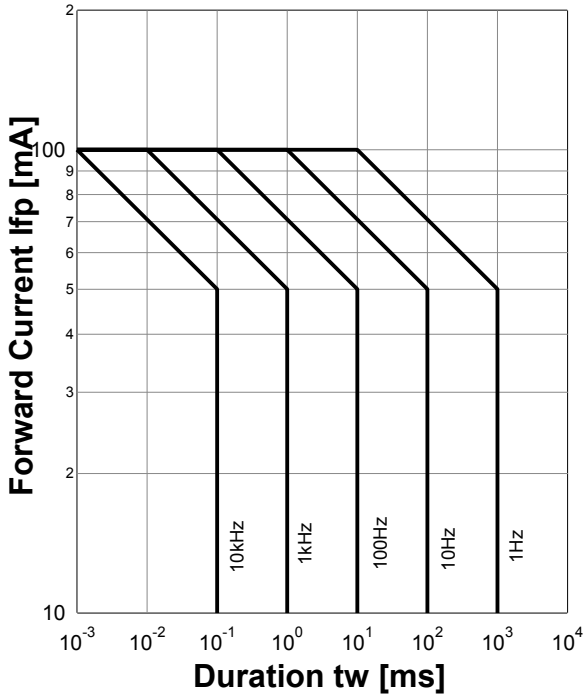
Forward Curent - Forward Voltage



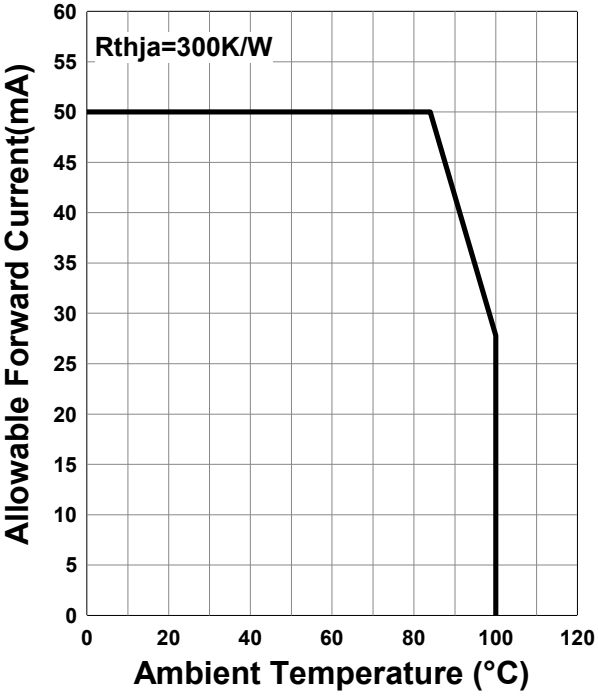
Relative Radiant Intensity - Forward Current

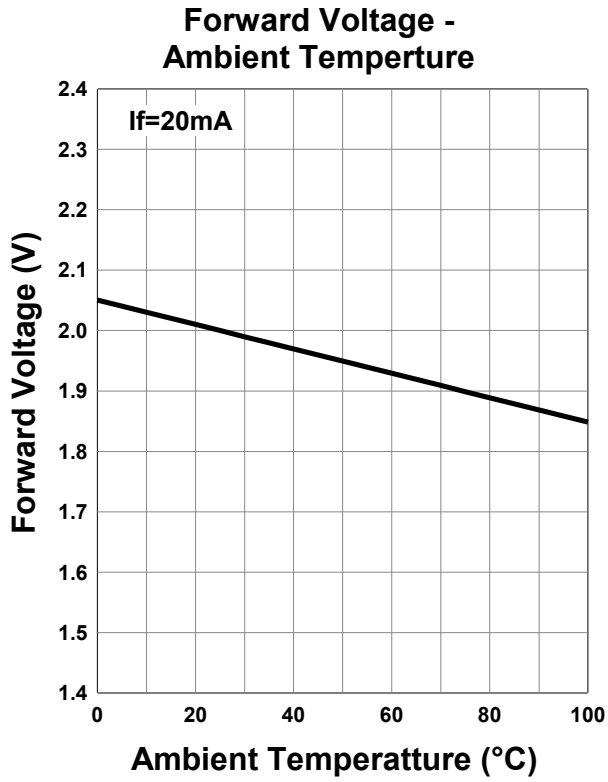


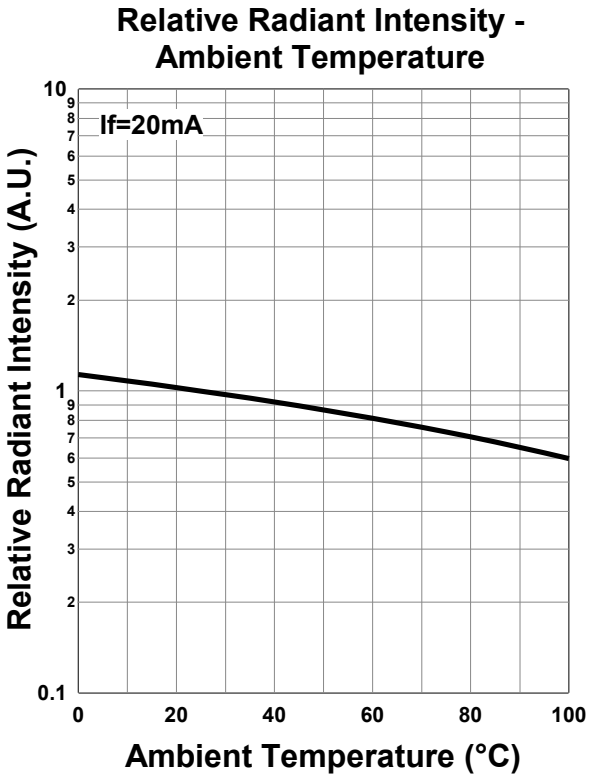
Forward Current - Pulse Duration

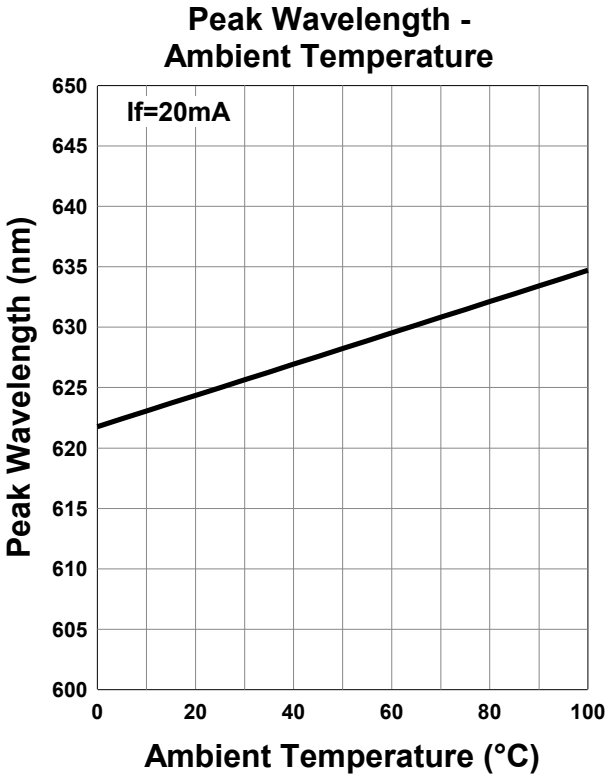


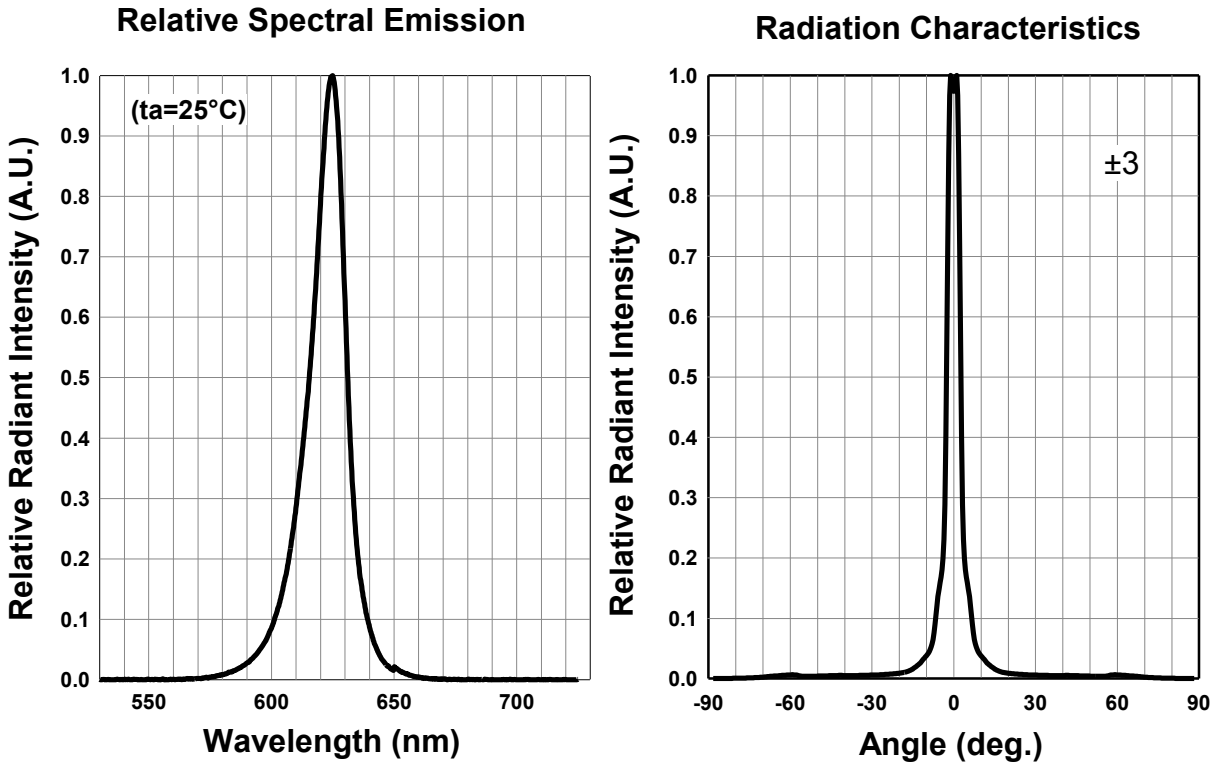
Allowable Forward Current - Ambient Temperature

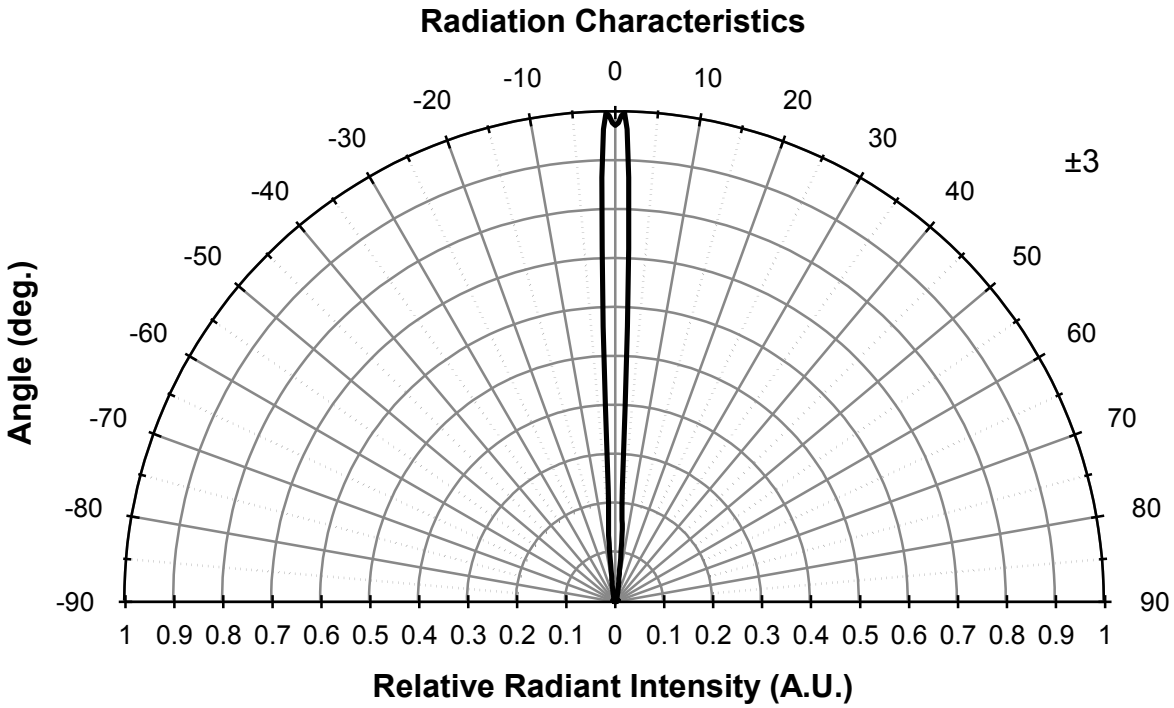



Forward Voltage -
Ambient Temperture
If=20mA
Forward Voltage (V)
2.4
2.3
2.2
2.1
2.0
1.9
1.8
1.7
1.6
1.5
1.4
0
20
40
60
80
100
Ambient Temperatture (°C)


Relative Radiant Intensity -
Ambient Temperature
If=20mA
Relative Radiant Intensity (A.U.)
10
1
0.1
0
20
40
60
80
100
Ambient Temperature (°C)


Peak Wavelength -
Ambient Temperature
If=20mA
Peak Wavelength (nm)
650
645
640
635
630
625
620
615
610
605
600
0
20
40
60
80
100
Ambient Temperature (°C)


Relative Spectral Emission
(ta=25°C)
Relative Radiant Intensity (A.U.)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
550
600
650
700
Wavelength (nm)
Radiation Characteristics
±3
Relative Radiant Intensity (A.U.)
-90
-60
-30
0
30
60
90
Angle (deg.)


Radiation Characteristics
±3
Angle (deg.)
0
10
20
30
40
50
60
70
80
90
-10
-20
-30
-40
-50
-60
-70
-80
-90
1 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Relative Radiant Intensity (A.U.)

Disclaimer

Product specifications and data shown in this product catalog are subject to change without notice for the purposes of improving product performance, reliability, design, or otherwise.

Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements. Product data and parameters may vary by user application and over time.

Products shown in this catalog are intended to be used for general electronic equipment. Products are not guaranteed for applications where product malfunction or failure may cause personal injury or death, including but not limited to life-supporting / saving devices, medical devices, safety devices, airplanes, aerospace equipment, automobiles, traffic control systems, and nuclear reactor control systems.

2014.10

Marubeni America Corporation | 3945 Freedom Circle, Suite 1000, Santa Clara, CA95054
Tel: 408-330-0650 | Fax: 408-330-0655 | Email: sales@tech-led.com