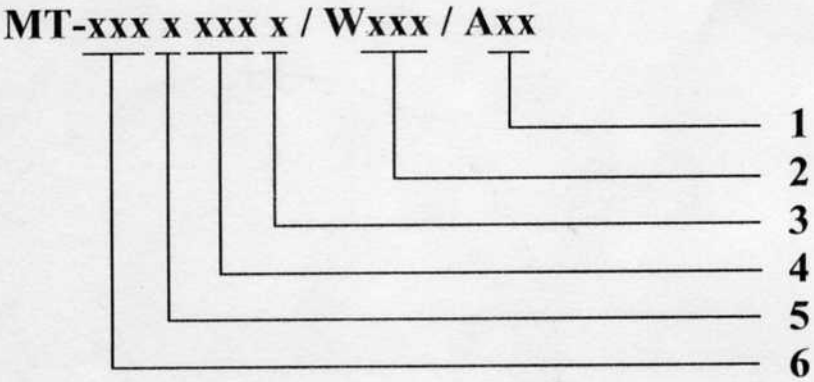
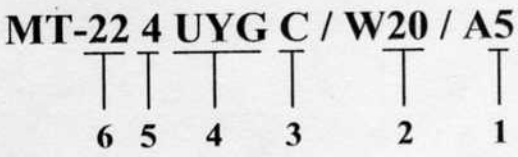
➤ Part Number Introduction



1	Brightness Ranking	From A1 ~ A12 , please check the data from our Ranking System (Page : 2)
2	Viewing Angle 2θ1/2	10 : 10° , 20 : 20° .....
3	Lens Color	C : Water Clear , D : Color Diffused , T : Color Transparent , W : White Diffused (Milky)
4	Emitting Color	UR : Ultra Red , UYG : Ultra Yellow Green , PUG : Pure Green , UW : Ultra White .....
5	Lead Frame	2 : Short , 3 & 4 : Long , 6 & 9 : Multi-Color Type , 8 : RGB Type
6	Lens Shape	20, 22 : 3mm Round , 33 : 5mm Round , 51,52 : 2x5mm Rectangular , 8 : 8mm Round

➤ Example



From the above table :

1. A5 : 1400~2000 mcd *
2. 20 : Viewing Angle 20°
3. C : Water Clear Lens
4. UYG : Emitting Ultra Yellow Green
5. 4 : Long Lead Type
6. 22 : 3mm Round

* Check the data from our Ranking System (Page 2&3)

Notes :

Please feel free to contact our Engineering Department if you have any further questions.

■ Wavelength (nm) Ranking System

▶ **Blue with 5nm in difference**

Rank Code	Range in nm
5B1	450 ~ 455
5B2	455 ~ 460
5B3	460 ~ 465
5B4	465 ~ 470
5B5	470 ~ 475

▶ **Pure Green with 5nm in difference**

Rank Code	Range in nm
5G1	505 ~ 510
5G2	510 ~ 515
5G3	515 ~ 520
5G4	520 ~ 525
5G5	525 ~ 530

▶ **Ultra Violet**

Rank Code	Range in nm
1	380 ~ 385
2	385 ~ 390
3	390 ~ 395
4	395 ~ 400
5	400 ~ 410

▶ **Ultra Yellow**

Rank Code	Range in nm
1	583 ~ 586
2	586 ~ 589
3	589 ~ 592
4	592 ~ 594

▶ **Note**

1. The tolerance for the wavelength is +/- 1nm.
2. The above data is adjustable.

▶ **Blue with 3nm in difference**

Rank Code	Range in nm
3B1	460 ~ 464
3B2	464 ~ 467
3B3	467 ~ 470
3B4	470 ~ 472
3B5	472 ~ 475

▶ **Bluish Green with 5nm in difference**

Rank Code	Range in nm
5BG1	490 ~ 495
5BG2	495 ~ 500
5BG3	500 ~ 505

▶ **Ultra Red , Orange Red and Hyper Red**

Rank Code	Range in nm
1	615 ~ 620
2	620 ~ 625
3	625 ~ 630
4	630 ~ 640
5	640 ~ 660

▶ **Ultra Orange**

Rank Code	Range in nm
1	600 ~ 603
2	603 ~ 607
3	607 ~ 610

▶ **Ultra Green , Yellow Green**

Rank Code	Range in nm
1	563 ~ 566
2	566 ~ 569
3	569 ~ 572
4	572 ~ 575

■ Luminous Intensity (Iv) Ranking System

▶ Viewing Angle < 25°

Rank Code	Iv (mcd)
A1	300 ~ 500
A2	500 ~ 800
A3	800 ~ 1000
A4	1000 ~ 1400
A5	1400 ~ 2000
A6	2000 ~ 3000
A7	3000 ~ 4000
A8	4000 ~ 6000
A9	6000 ~ 8000
A10	8000 ~ 11000
A11	11000 ~ 15000

▶ Viewing Angle > 25° < 50°

Rank Code	Iv (mcd)
A1	50 ~ 100
A2	100 ~ 200
A3	200 ~ 350
A4	350 ~ 500
A5	500 ~ 800
A6	800 ~ 1000
A7	1000 ~ 1400
A8	1400 ~ 2000
A9	2000 ~ 3000
A10	3000 ~ 4000
A11	4000 ~ 6000

▶ Viewing Angle > 50°

Rank Code	Iv (mcd)
A1	10 ~ 20
A2	20 ~ 30
A3	30 ~ 50
A4	50 ~ 100
A5	100 ~ 200
A6	200 ~ 350
A7	350 ~ 500
A8	500 ~ 800
A9	800 ~ 1000
A10	1000 ~ 1400
A11	1400 ~ 2000

■ Forward Voltage (VF) Ranking System

▶ Blue, Pure Green, Bluish Green, Ultra Violet, White

Rank Code	Vf (V)
21	2.8 ~ 3.0
22	3.0 ~ 3.2
23	3.2 ~ 3.4
24	3.4 ~ 3.6
25	3.6 ~ 3.8
26	3.8 ~ 4.0

▶ Red , Green , Orange , Yellow

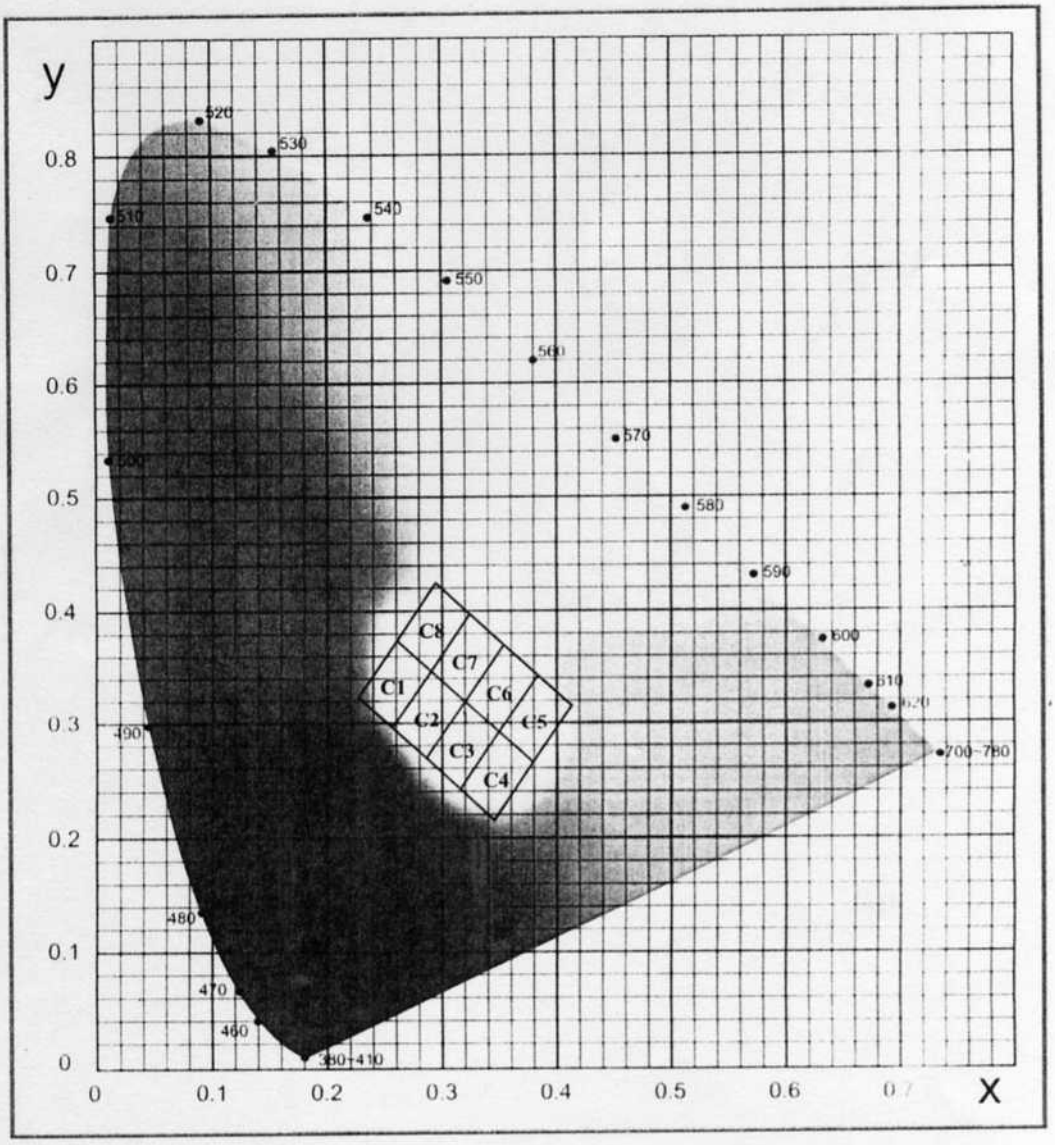
Rank Code	Vf (V)
11	1.7 ~ 1.8
12	1.8 ~ 1.9
13	1.9 ~ 2.0
14	2.0 ~ 2.1
15	2.1 ~ 2.2
16	2.2 ~ 2.3
17	2.3 ~ 2.4
18	2.4 ~ 2.5
19	2.5 ~ 2.6

■ Notice

1. The tolerance for the forward voltage is +/- 0.1V
2. The tolerance for the luminous intensity is +/- 15%
3. The above data is adjustable.

▶ **Standard Color Classification for White LEDs**

Rank Code	Top		Left		Bottom		Right	
	X	Y	X	Y	X	Y	X	Y
C1	0.26	0.37	0.23	0.32	0.26	0.30	0.29	0.34
C2	0.29	0.34	0.26	0.30	0.29	0.27	0.32	0.32
C3	0.32	0.32	0.29	0.27	0.32	0.24	0.35	0.29
C4	0.35	0.29	0.32	0.24	0.35	0.22	0.38	0.26
C5	0.38	0.34	0.35	0.29	0.38	0.26	0.41	0.32
C6	0.36	0.37	0.32	0.32	0.35	0.29	0.38	0.34
C7	0.32	0.40	0.29	0.34	0.32	0.32	0.36	0.37
C8	0.30	0.42	0.26	0.37	0.29	0.34	0.32	0.40



■ **Notice**

1. The above data is adjustable.