

Numeric LED

Multi-digits

Type	Character height (mm)	Type of display	Common pins	Radiation color					Outline dimensions	
				P	D	S	H	E	Page	Figure
				Red	Red	Sunset orange	Yellow	Yellow-green		
Mold Type	6.0		A	GL7P202			GL7H202	GL7E202	→	16
			K	GL6P202			GL6H202	GL6E202		
	10.16		A	GL7P201	GL7D201		GL7H201	GL7E201	→	12
			K	GL6P201	GL6D201		GL6H201	GL6E201		
	14.12		A	GL7P220	GL7D220	GL7S220	GL7H220	GL7E220	→	11
			K	GL6P220	GL6D220	GL6S220	GL6H220	GL6E220		
	8.0		A	GL3P306	GL3D306			GL3E306	→	17
			K	GL3P305	GL3D305			GL3E305		
	6.2		A	GL3P412			GL3H412	GL3E412	→	18
			K	GL3P411			GL3H411	GL3E411		
	8.0		A	GL3P422				GL3E422	→	19
			K	GL3P421				GL3E421		
8.4		A	GL3P404	GL3D404			GL3E404	→	20	
		K	GL3P403	GL3D403			GL3E403			
7.6		A	GL3P508D					→	21	
		K	GL3P507D							
Substrate Type	7.6		A	GL7P208U	GL7D208U			GL7E208U	→	15
			K	GL6P208U	GL6D208U			GL6E208U		
	10.0		A	GL3P202	GL3D202			GL3E202	→	13
			K	GL3P201	GL3D201			GL3E201		
			A	GL7P206U	GL7D206U			GL7E206U		
			K	GL6P206U	GL6D206U			GL6E206U		
Page for ratings/characteristics diagrams				→	→	→	→	→		

*1 A: Anode common K: Cathode common

Electro-optical Characteristics(Mold Type) Figures shown below are values per segment. (Ta=25°C)

Character height (mm)	Radiation color	Forward voltage V _F (V)		Peak emission wavelength λ _p (nm)	Spectrum radiation bandwidth Δλ(nm)	I _F (mA)	Reverse current I _R (μA)	V _R (V)
		TYP.	MAX	TYP.	TYP.		MAX.	
6.0	P	1.9	2.5	695	100	5	10	4
6.2	D	1.85	2.3	635	35	10	10	4
7.6	S	1.9	2.5	610	35	10	10	4
8.0	H	1.9	2.5	585	30	10	10	4
8.2	E	2.0	2.5	565	30	10	10	4
8.4	K	2.0	2.5	555	30	10	10	4
10.16	D	3.6	4.6	635	35	10	10	5
14.12	S	3.8	5.0	610	35	10	10	4
25.4	H	3.8	5.0	585	30	10	10	5
	E	4.0	5.0	565	30	10	10	5

Electro-optical Characteristics(Substrate Type) Figures shown below are values per segment. (Ta=25°C)

Character height (mm)	Radiation color	Forward voltage V _F (V)		Peak emission wavelength λ _p (nm)	Spectrum radiation bandwidth Δλ(nm)	I _F (mA)	Reverse current I _R (μA)	V _R (V)
		TYP.	MAX	TYP.	TYP.		MAX.	
7.6	P	1.9	2.5	695	100	5	10	4
10.0	D	1.85	2.5	635	35	10	10	4
	E	2.0	2.5	565	30	10	10	4
45.0	D	4.0	5.6	635	35	20	10	4
	E	4.0	5.6	565	30	10	10	4

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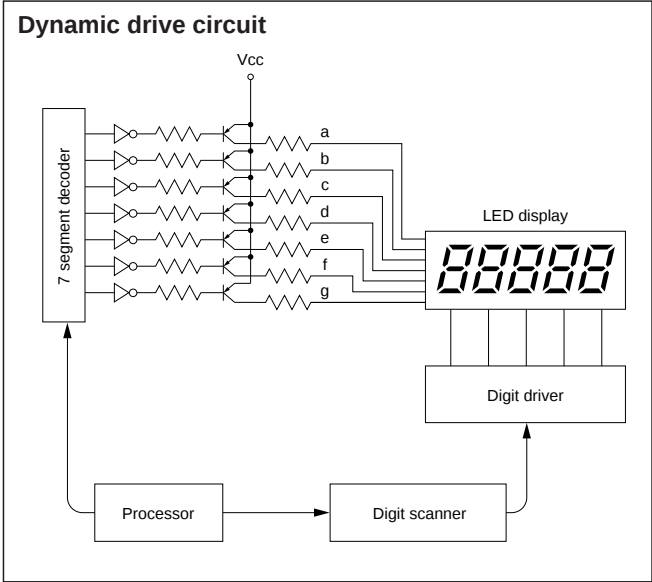
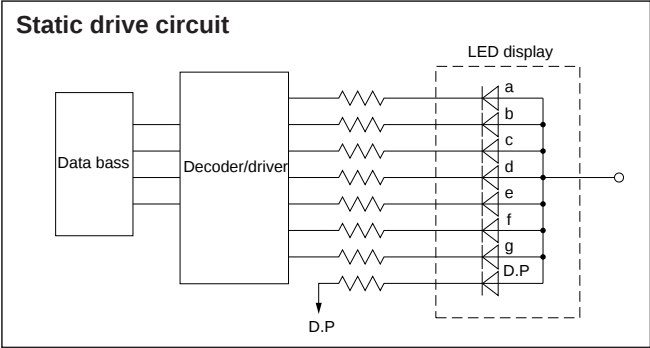
(Internet) • Data for sharp's optoelectronic/power device is provided for internet.(Address <http://www.sharp.co.jp/ecg/>)

Numeric LED

■ Luminous Intensity(Unit:mcd) Figures shown below are values per segment. (Ta=25°C)

Type	Digit	Character height (mm)	Radiation color		P	D	S	H	E	K
			Series		Red	Red	Sunset orange	Yellow	Yellow-green	Green
			Anode common	Cathode common	TYP	TYP	TYP	TYP	TYP	TYP
Mold Type	1-digit	8.0	GL9□030	GL8□030	1.0	4.14	1.5	2.6	2.5	1.56
		10.16	GL9□040	GL8□040	0.8	3.0	4.3	2.5	3.0	1.75
		14.12	GL9□156	GL8□156	1.0	4.0	3.9	4.5	3.0	2.1
	2-digits	25.4	GL9□100	GL8□100		6.38	4.8	4.6	3.5	
		6.0	GL7□202	GL6□202	0.3			0.35	1.8	
		10.16	GL7□201	GL6□201	0.8	3.8		4.1	3.5	
	3-digits	14.12	GL7□220	GL6□220	1.0	4.0	4.5	4.5	3.0	
		8.0	GL3□306	GL3□305	1.0	2.80			2.85	
		6.2	GL3□412	GL3□411	0.25			0.6	0.7	
	4-digits	8.0	GL3□422	GL3□421	0.66		1.25		2.2	
		8.4	GL3□404	GL3□403	0.3	0.8			2.0	
		7.6	GL3□508D	GL3□507D	0.3					
Substrate Type	1-digit	45.0	GL9□18	GL8□18		6.4			3.4	
	2-digits	7.6	GL7□208U	GL6□208U	0.2	0.4			0.6	
		10.0	GL3□202	GL3□201	0.4	0.6			1.0	
			GL7□206U	GL6□206U	0.4	0.6			1.0	

* As for current conditions, refer to I_F in electro-optical characteristics

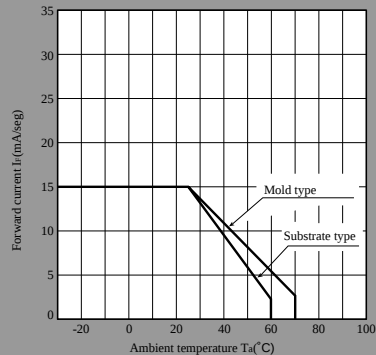


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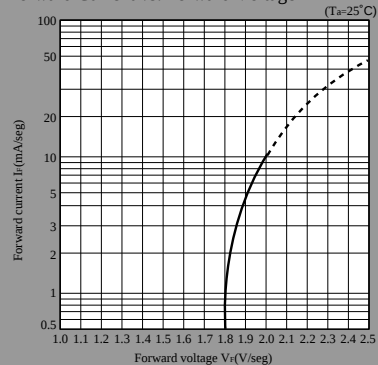
Numeric LED Characteristics Diagrams

P series

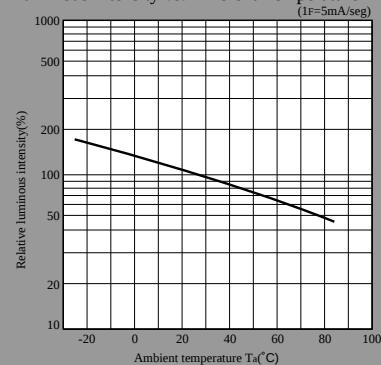
Forward Current Derating Curve



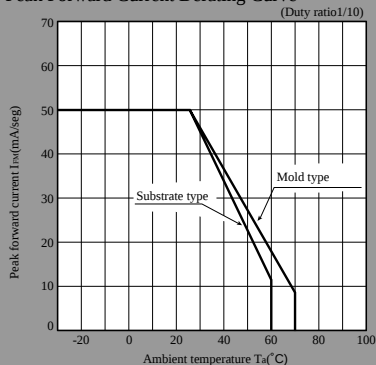
Forward Current vs. Forward Voltage*



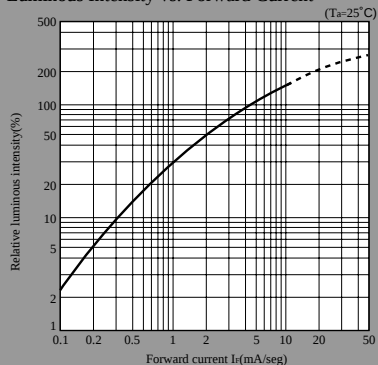
Luminous Intensity vs. Ambient Temperature



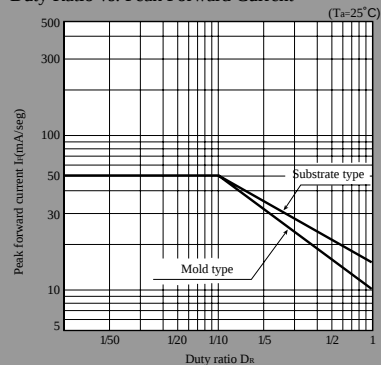
Peak Forward Current Derating Curve



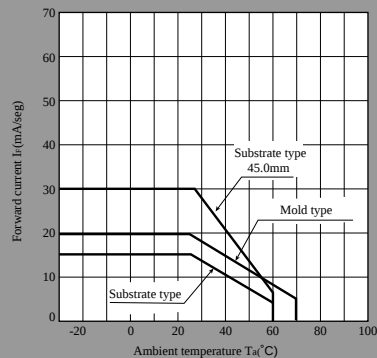
Luminous Intensity vs. Forward Current



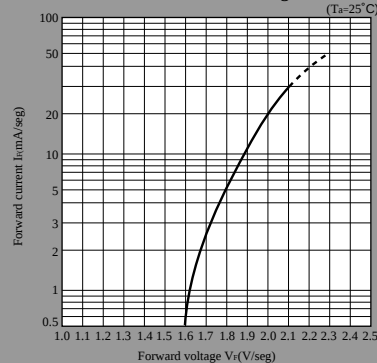
Duty Ratio vs. Peak Forward Current



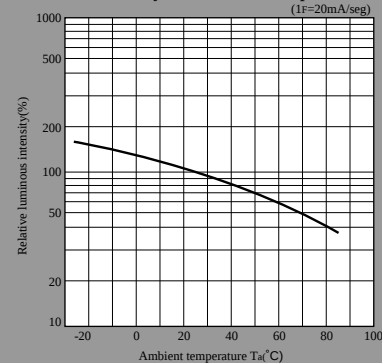
Forward Current Derating Curve



Forward Current vs. Forward Voltage*

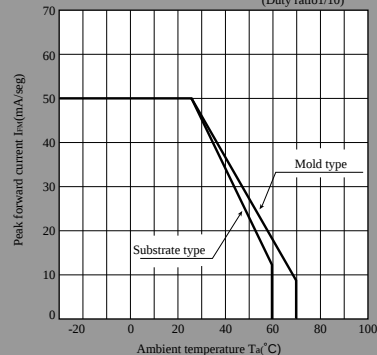


Luminous Intensity vs. Ambient Temperature



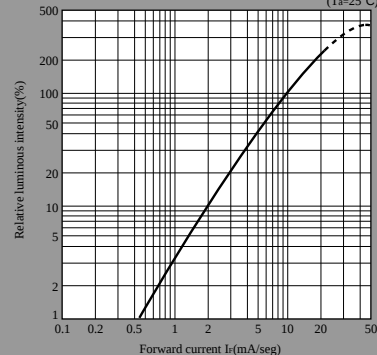
Peak Forward Current Derating Curve

(Duty ratio 1/10)



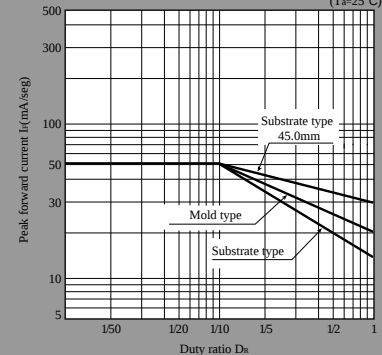
Luminous Intensity vs. Forward Current

(T_a = 25°C)



Duty Ratio vs. Peak Forward Current

(T_a = 25°C)



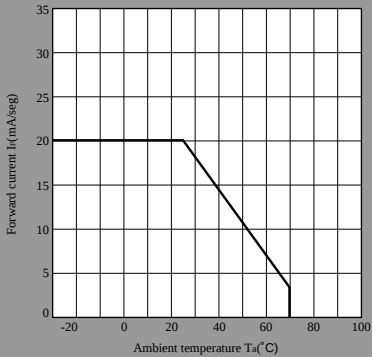
* In case of 25.4/45.0mm: value per 1segment 1chip

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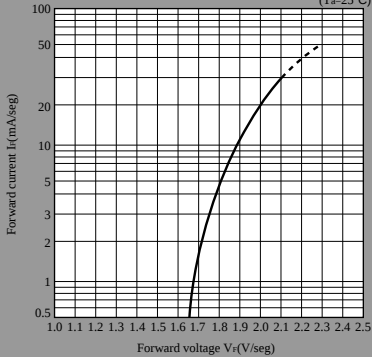
Numeric LED Characteristics Diagrams

S series

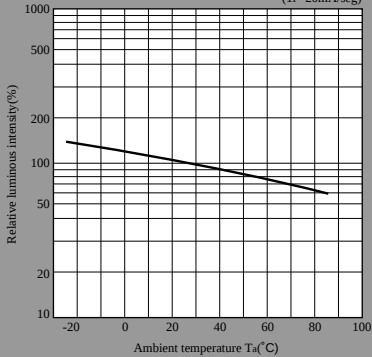
Forward Current Derating Curve



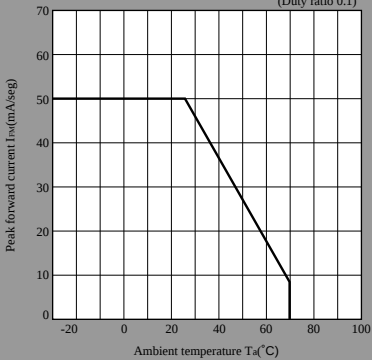
Forward Current vs. Forward Voltage*



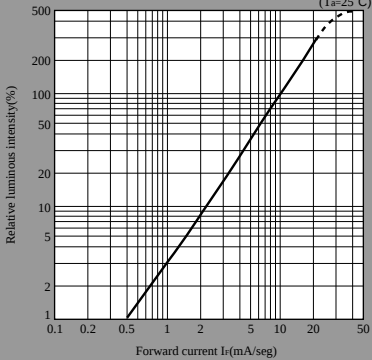
Luminous Intensity vs. Ambient Temperature
($I_f = 20\text{mA/seg}$)



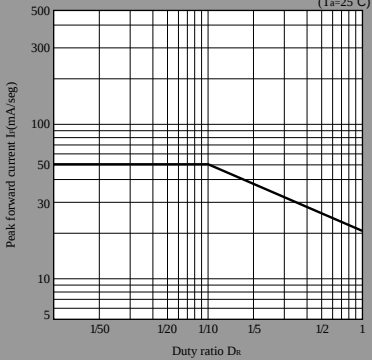
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current



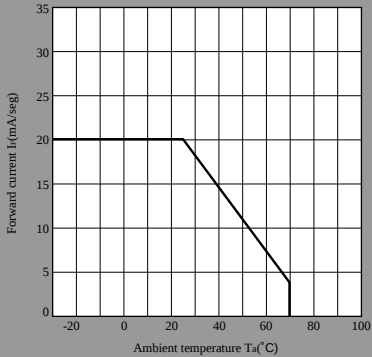
Duty Ratio vs. Peak Forward Current



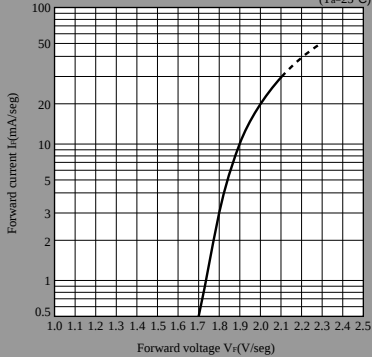
* In case of 25.4mm: value per 1segment 1chip

H series

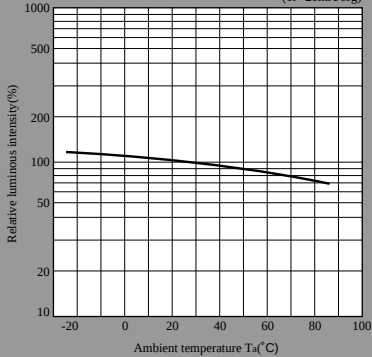
Forward Current Derating Curve



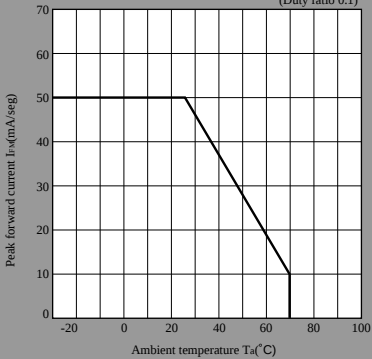
Forward Current vs. Forward Voltage*



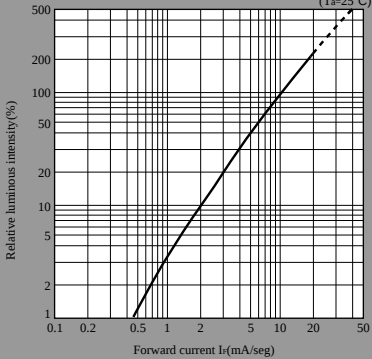
Luminous Intensity vs. Ambient Temperature
($I_f = 20\text{mA/seg}$)



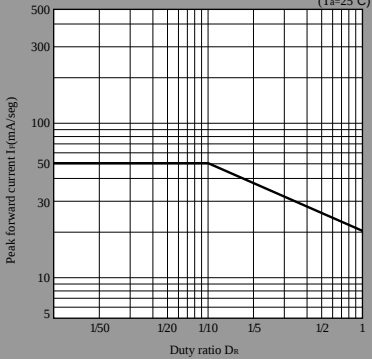
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current



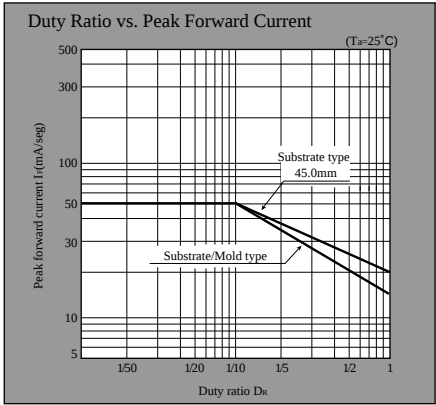
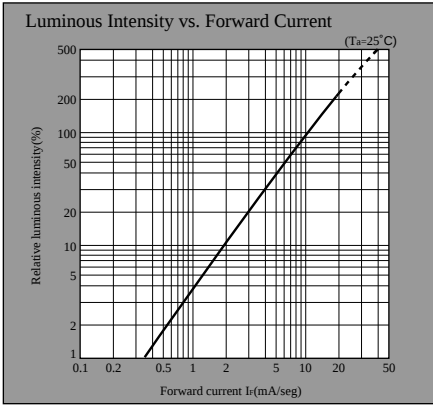
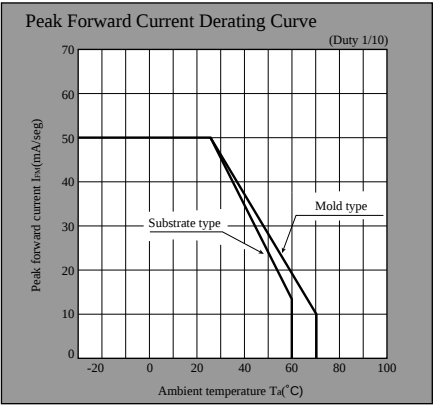
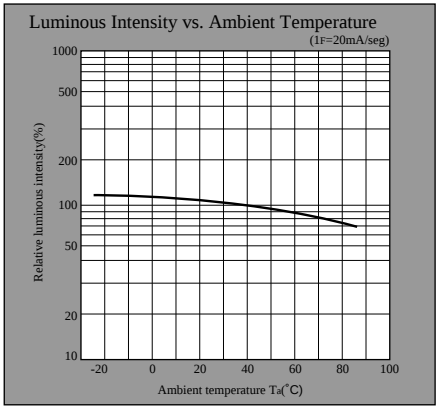
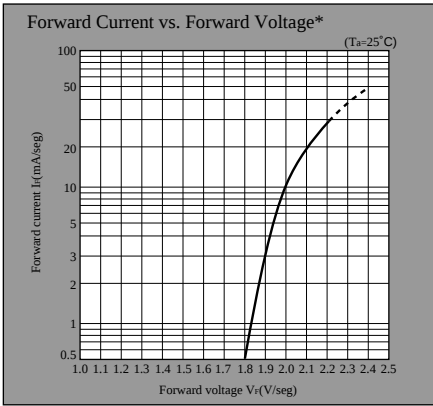
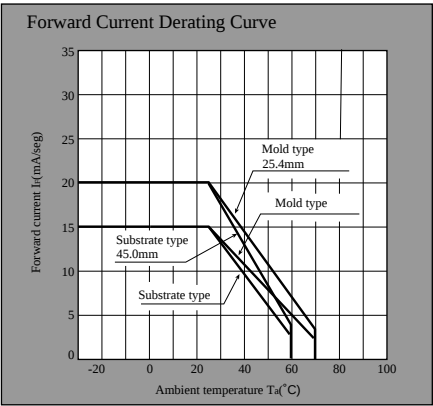
Duty Ratio vs. Peak Forward Current



* In case of 25.4mm: value per 1segment 1chip

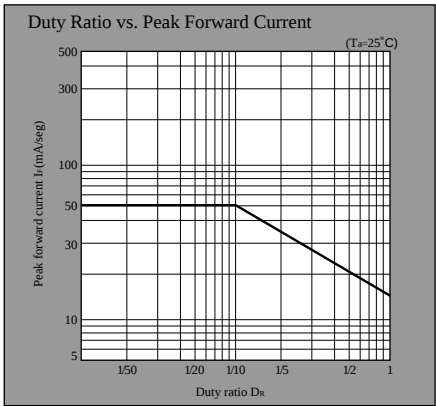
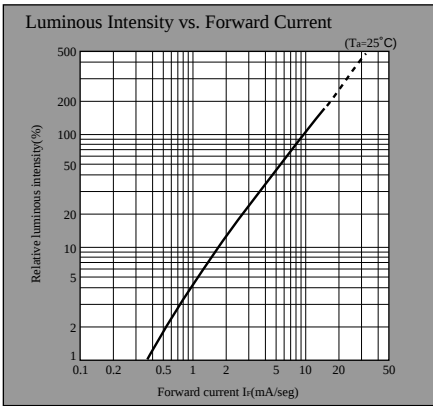
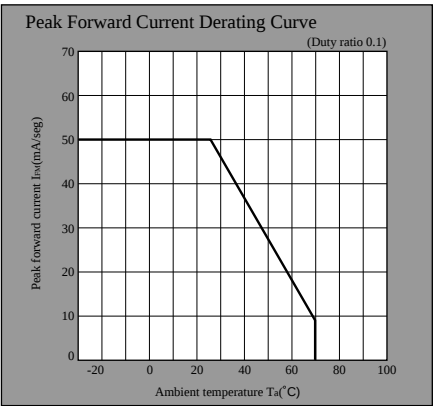
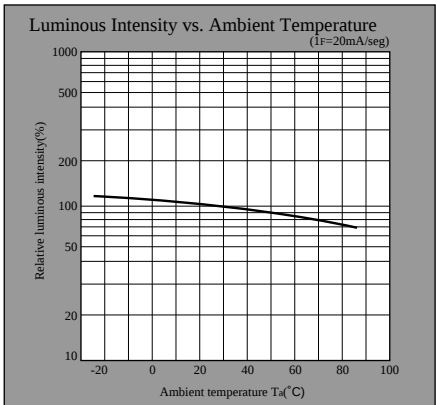
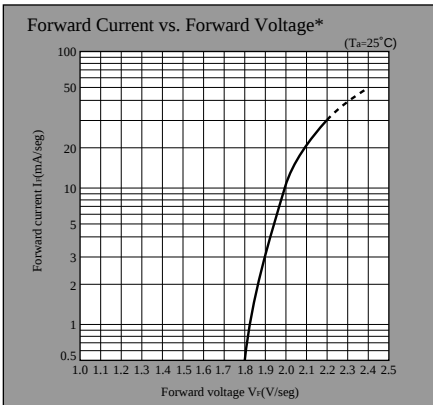
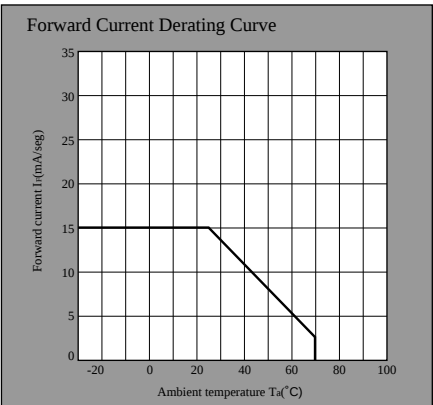
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E series



* In case of 25.4/45.0mm: value per 1segment 1chip

K series



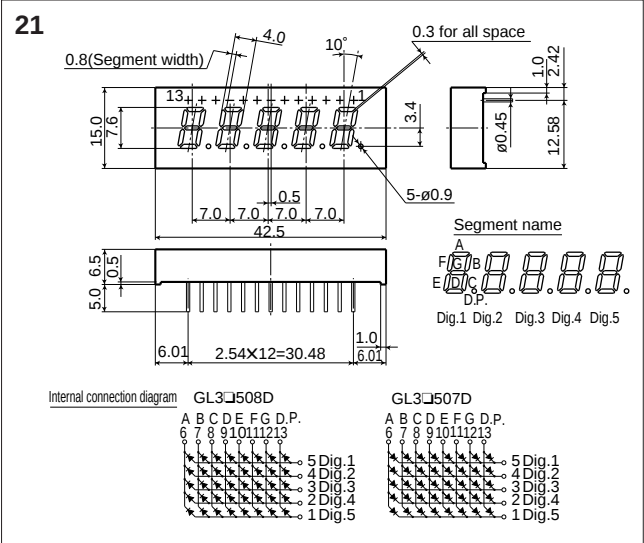
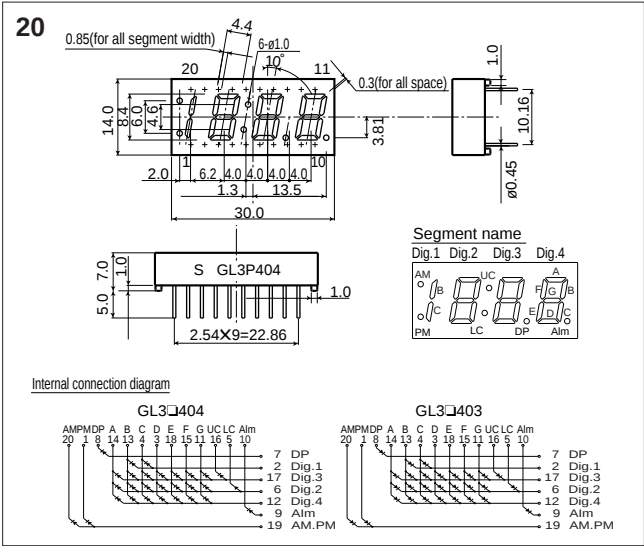
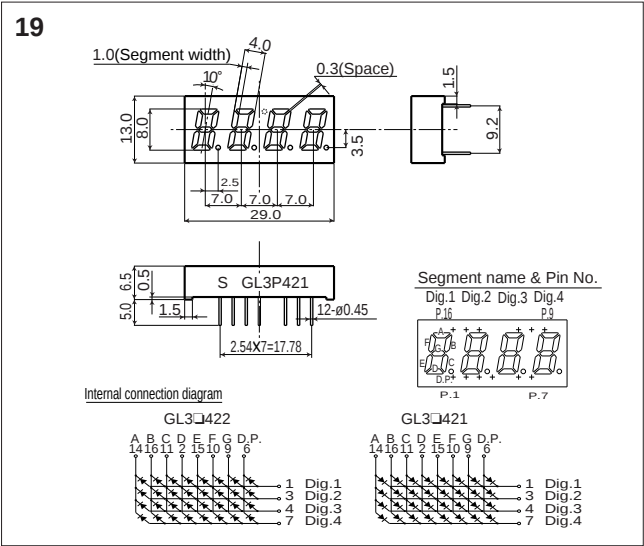
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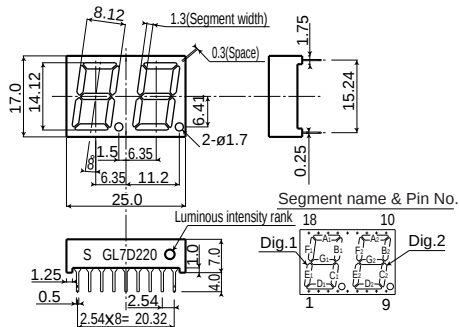
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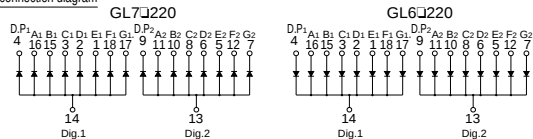
Numeric LED Outline Dimensions(Unit:mm)



11

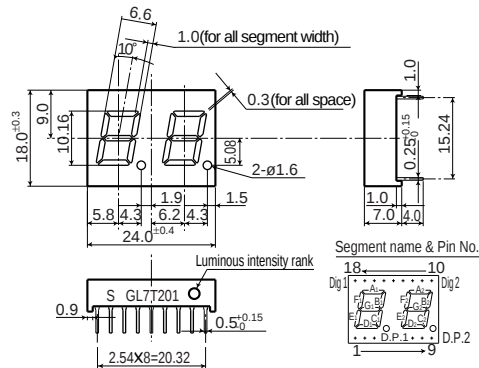


Internal connection diagram

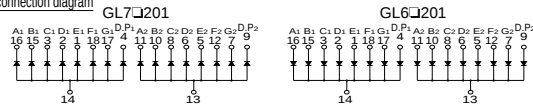


GL7□220 Series GL6□220 Series

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Internal connection diagram



GL7□201 Series GL6□201 Series

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