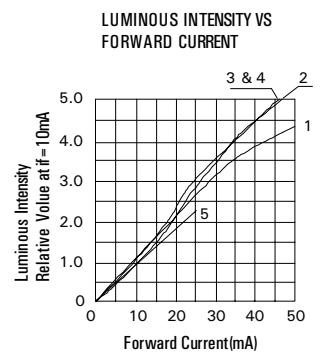
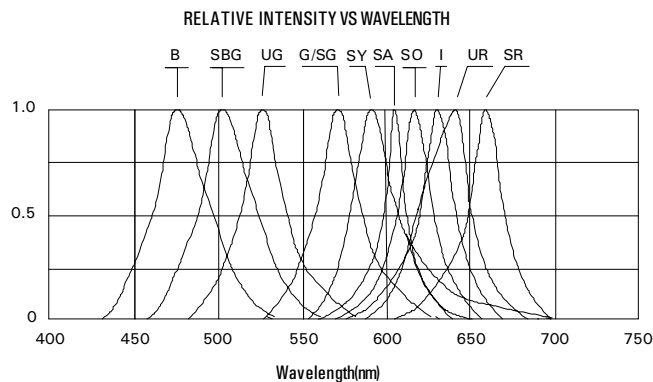
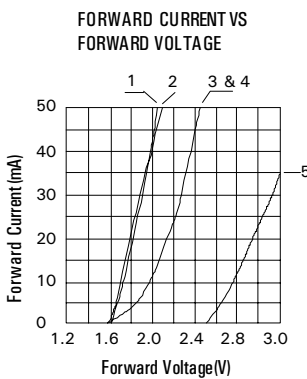


PART NO.	Column Anode	CA	KLP1057 I SR G SG SY SA UR SO B/UB BG UG W													
	Column Cathode	CC	KLP1157 I SR G SG SY SA UR SO B/UB BG UG W													
OPERATING CHARACTERISTICS AT 25°C (Bigger Display may have more than one LED chip per segment)			UNITS	SYMBOL	IRED I	SUPER RED SR	GREEN G	SUPER GREEN SG	SUPER YELLOW SY	SUPER AMBER SA	ULTRA RED UR	SUPER ORANGE SO	BLUE B/UB	BLUE GREEN BG	ULTRA GREEN UG	WHITE W
Semiconductor Composition					AlGaAs		GaP/AlInGaP		AlInGaP				SiC / GaInN			
Forward Voltage - Typical @ 10mA			V	V <sub>F</sub>	2.10	1.90	2.20	2.20	2.10	2.10	1.90	1.90	3.50	3.50	3.50	3.50
Forward Voltage - Maximum @ 20 mA			V	V <sub>FM</sub>	2.40	2.10	2.60	2.40	2.40	2.40	2.10	2.40	4.50	4.50	4.50	4.50
Reverse Current @ V <sub>R</sub> = 5V			μA	I <sub>R</sub>	100	100	100	100	100	100	100	100	100	100	100	100
Peak Emission Wavelength			nm	λ <sub>p</sub>	630	660	568	568	590	610	645	620	470	502	525	---
Emission Wavelength Half Width			nm	Δλ	35	20	30	15	15	15	20	20	25	30	35	---
Luminous Intensity per Segment			μcd	I <sub>v</sub>	3500	6000	4000	6000	7000	7500	13000	13000	6000	7000	17000	---
ABSOLUTE MAXIMUM RATINGS AT 25°C			V	V <sub>R</sub>	5	5	5	5	5	5	5	5	5	5	5	5
Reverse Voltage			V	V <sub>R</sub>	5	5	5	5	5	5	5	5	5	5	5	5
Forward Current (avg)			mA	I <sub>F</sub>	20	20	20	20	20	20	20	20	20	20	20	20
Peak Forward Current (T<1μs)			mA	I <sub>FS</sub>	80	80	80	80	80	80	80	80	80	80	80	80
Operating / Storage Temperature Range			-10° C to + 85° C													
Lead Soldering Temperature			< 260° C for 5 Seconds													
Series Resistor to be used per segment : 300 Ohms @ 5V Supply (OR) 50 to 100 Ohms @ 3V Supply																

ELECTRICAL CHARACTERISTIC CURVES



1. AlGaAs : I, SR

2. GaP : G

3 & 4. AlInGaP : SG, SY, SA, UR, SO

5. GaInN : B, BG, UG, W