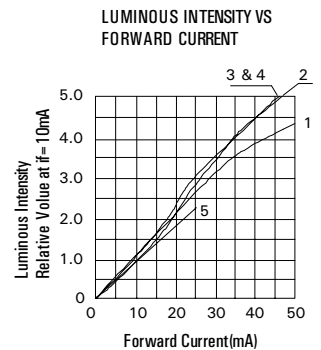
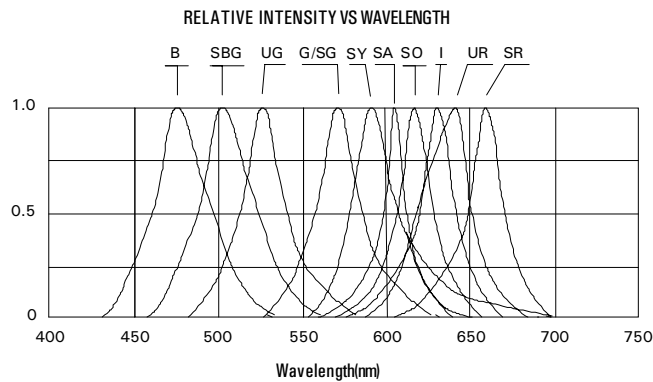
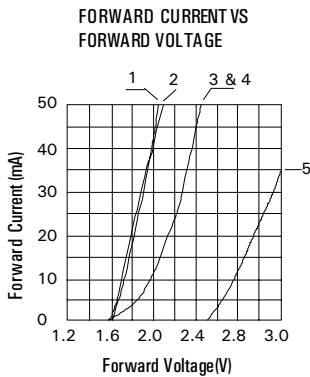


PART NO.	Common Anode	CA														
	Common Cathode	CC	KLS811	KLS81 SR	KLS81 G	KLS81 SG	KLS81 SY	KLS81 SA	KLS81 UR	KLS81 SO	KLS81 B/UB	KLS81 BG	KLS81 UG	KLS81 W		
			KLS821	KLS82 SR	KLS82 G	KLS82 SG	KLS82 SY	KLS82 SA	KLS82 UR	KLS82 SO	KLS82 B/UB	KLS82 BG	KLS82 UG	KLS82 W		
OPERATING CHARACTERISTICS AT 25°C (Bigger Display may have more than one LED chip per segment)			UNITS	SYMBOL	IRE D 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_F	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_{FM}	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 @ $V_R = 5V$			μA	I_R	100	100	100	100	100	100	100	100	100	100	100	100
Peak Emission Wavelength			nm	λ_p	630	660	568	568	590	610	645	620	470	502	525	---
Emission Wavelength Half Width			nm	$\Delta\lambda$	35	20	30	15	15	15	20	20	25	30	35	---
Luminous Intensity per Segment			μcd	I_V	3500	6000	4000	6000	7000	7500	13000	13000	6000	7000	17000	---
ABSOLUTE MAXIMUM RATINGS AT 25°C																
Reverse Voltage			V	V_R	5	5	5	5	5	5	5	5	5	5	5	5
Forward Current (avg)			mA	I_F	20	20	20	20	20	20	20	20	20	20	20	20
Peak Forward Current ($T < 1\mu s$)			mA	I_{FS}	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