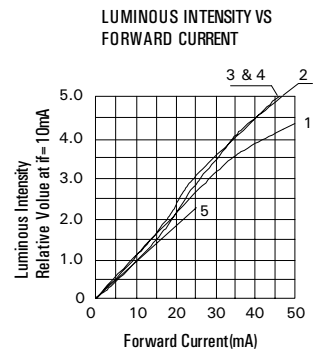
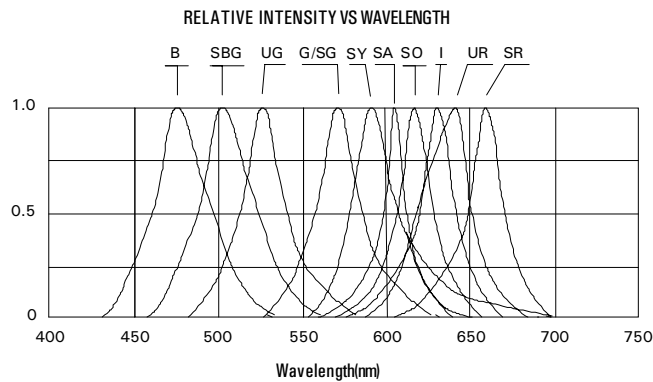
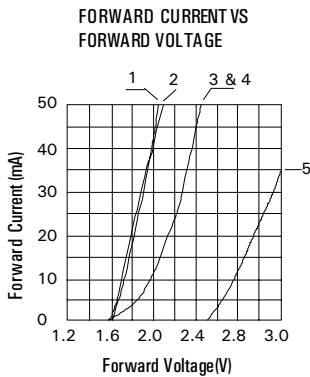


PART NO.	Common Anode	CA															
	Common Cathode	CC	KLS51 I	KLS51 SR	KLS51 G	KLS51 SG	KLS51 SY	KLS51 SA	KLS51 UR	KLS51 SO	KLS51 B/UB	KLS51 BG	KLS51 UG	KLS51 W			
			KLS52 I	KLS52 SR	KLS52 G	KLS52 SG	KLS52 SY	KLS52 SA	KLS52 UR	KLS52 SO	KLS52 B/UB	KLS52 BG	KLS52 UG	KLS52 W			
OPERATING CHARACTERISTICS 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		AllnGaP			SiC / GalnN					
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																	
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. AllnGaP : SG, SY, SA, UR, SO

5. GalnN : B, BG, UG, W