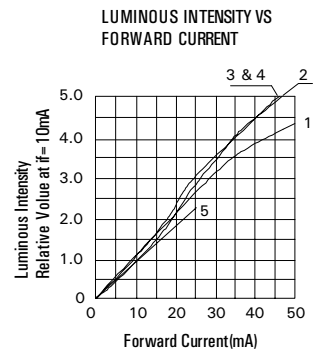
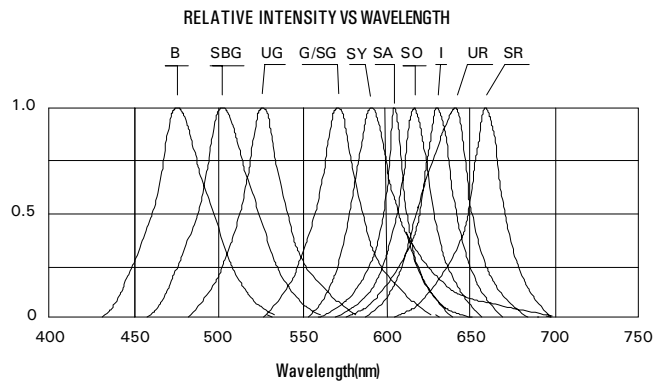
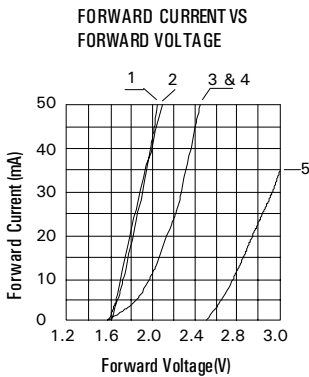


PART NO.			KLARW10 I	KLARW10 SR	KLARW10 G	KLARW10 SG	KLARW10 SY	KLARW10 SA	KLARW10 UR	KLARW10 SO	KLARW10 B/UB	KLARW10 BG	KLARW10 UG	KLARW10 W		
OPERATING CHARACTERISTICS AT 25°C (Bigger Display may have more than one LED chip per segment)			UNITS	SYMBOL	IRE D I	SUPER RED SR	GREEN G	SUPER GREEN SG	SUPER 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	$V_F$	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 @ $V_R = 5V$			$\mu A$	$I_R$	100	100	100	100	100	100	100	100	100	100	100	100
Peak Emission Wavelength			nm	$\lambda_p$	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			$\mu cd$	$I_V$	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. AllnGaP : SG, SY, SA, UR, SO

5. GalnN : B, BG, UG, W