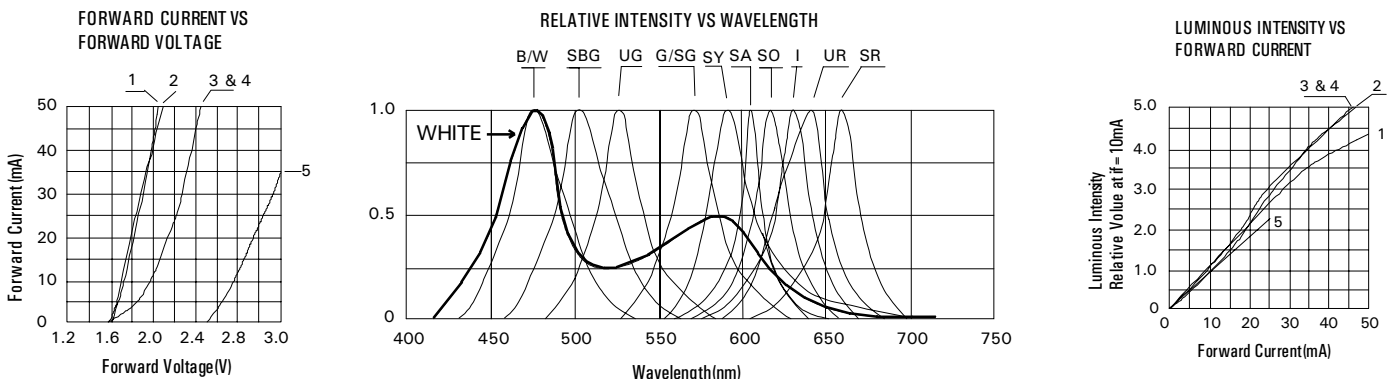


Face Length	MM	2.8		
Face Width	MM	3.2		
Height	MM	1.9		
Pin Spacing	MM	2.2		
Row Spacing	MM	3.2		
No. of pins	Pins	4		
Viewing Angle	2 $\frac{1}{2}$ Deg.	120		
Recommended Combination KLSL3228 SR-SG KLSL3228 SO-SG KLSL3228 UR-UG KLSL3228 SO-SY or as per order Note : All Dimensions are in mm (inches) Tolerance ± 0.2 mm				

PART NO.			KLSL3228				KLSL 3228	KLSL 3228	KLSL 3228	KLSL 3228	KLSL 3228	KLSL 3228	KLSL 3228	KLSL 3228	KLSL 3228	
OPERATING CHARACTERISTICS AT 25°C <small>(Bigger Display may have more than one LED chip per segment)</small>			UNITS	SYMBOL	RED 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 @ 70 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 @ $V_R = 5V$			mA	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	D_{λ}	35	20	30	15	15	15	20	20	25	30	35	---
Luminous Intensity per Segment @ 70mA			mcd	I_V	3500	6000	4000	6000	7000	7500	13000	13000	6000	7000	17000	---
Lumens Flux @70mA			mlm	Φ_V	-	-	-	-	-	-	-	-	-	-	-	4000
ABSOLUTE MAXIMUM RATINGS AT 25°C			V	V_R	5	5	5	5	5	5	5	5	5	5	5	5
Reverse Voltage			mA	I_F	100	100	100	100	100	100	100	100	100	100	100	100
Forward Current (avg) *(NOTE 1)			mA	I_{FS}	150	150	150	150	150	150	150	150	150	150	150	150
Peak Forward Current (T<1ms)																
Operating / Storage Temperature Range			-10° C to + 85° C													
Lead Soldering Temperature			< 200° C for 5 Seconds													
Series Resistor to be used per segment : 300 Ohms @ 5V Supply (OR) 50 to 100 Ohms @ 3V Supply																

*NOTE 1. Use Adequate heatsink (250mm² plus) for current above 20mA

ELECTRICAL CHARACTERISTIC CURVES



1. AlGaAs : I, SR 2. GaP : G 3 & 4. AlInGaP : SG, SY, SA, UR, SO 5. GaInN : B, BG, UG, W

KPC/KLSL3228XX-XX Rev. 00 1-01-04

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