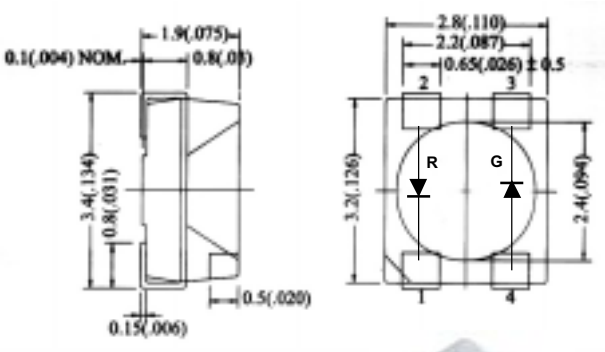
DATA SHEET 46.1 (a&b) KLSL3228(BI COLOR) KLSL3228XX-XX

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	2θ/2 Deg.	120

Recommended Combination
KLSL3228 SR-SG
KLSL3228 SO-SG
KLSL3228 UR-UG
KLSL3228 SO-SY
or as per order

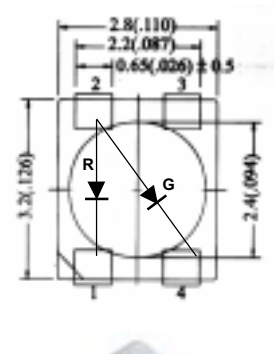
Note : All Dimensions are in mm (inches)



A=ANODE
C=CATHODE

46.1a 4 Pads

Tolerance ± 0.2 mm

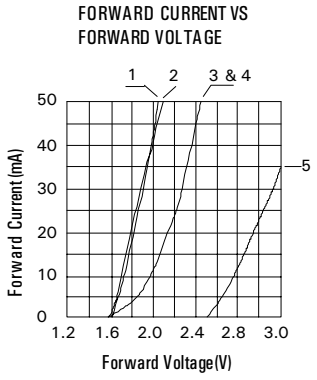


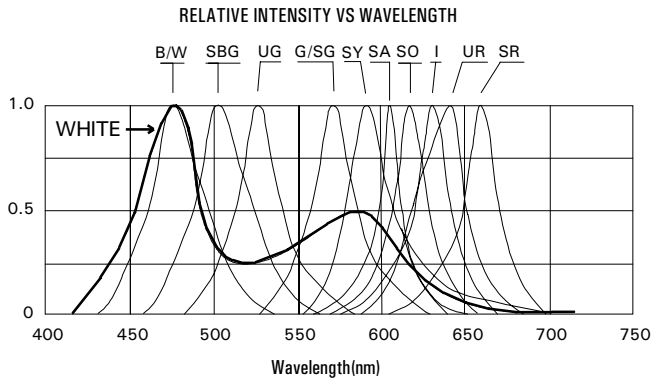
46.1b Common Anode-3 Active Pads

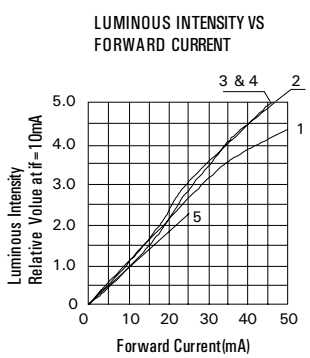
PART NO.			KLSL3228			KLSL 3228	KLSL 3228	KLSL 3228	KLSL 3228	KLSL 3228	KLSL 3228	KLSL 3228	KLSL 3228	KLSL 3228
OPERATING CHARACTERISTICS AT 25°C (Bigger Display may have more than one LED chip per segment)	UNITS	SYMBOL	IRED I	SUPER RED SR	GREEN G	SUPER GREEN SG	SUPER YELLOW SY	SUPER AMBER SA	ULTRA RED 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_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	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	Δ_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	$\varnothing_V$	-	-	-	-	-	-	-	-	-	-	-	4000
ABSOULTE 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<1µs)														
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														

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

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