

LED LIGHT MODULE

PRELIMINARY SPEC

Features

- THE LED LIGHT MODULE CONSISTS OF A MAXIMUM OF 26 HIGH-BRIGHTNESS PLCC-2 SMD LEDS MOUNTED ON FLEXIBLE PCB WITH SELF-ADHESIVE BACKING.
- EACH LED HAS 120° VIEWING ANGLE FOR EVEN LIGHT DISTRIBUTION.
- LENGTH OF EACH MODULE CAN RANGE FROM 28mm (2 LEDS) TO 364mm (26 LEDS).
- UP TO TEN FULL MODULES (364cm, 260 LEDS) CAN BE CONNECTED TO ONE POWER SUPPLY.
- Rohs Compliant.





Applications

- BACKLIGHTING OF DIFFUSED GLASSES IN LIGHT ADVERTISEMENT.
- BORDER MARKER.
- INDIRECT ILLUMINATION.
- ESCAPE ROUTE MARKER.
- STAIR MARKERS.

Application Notes

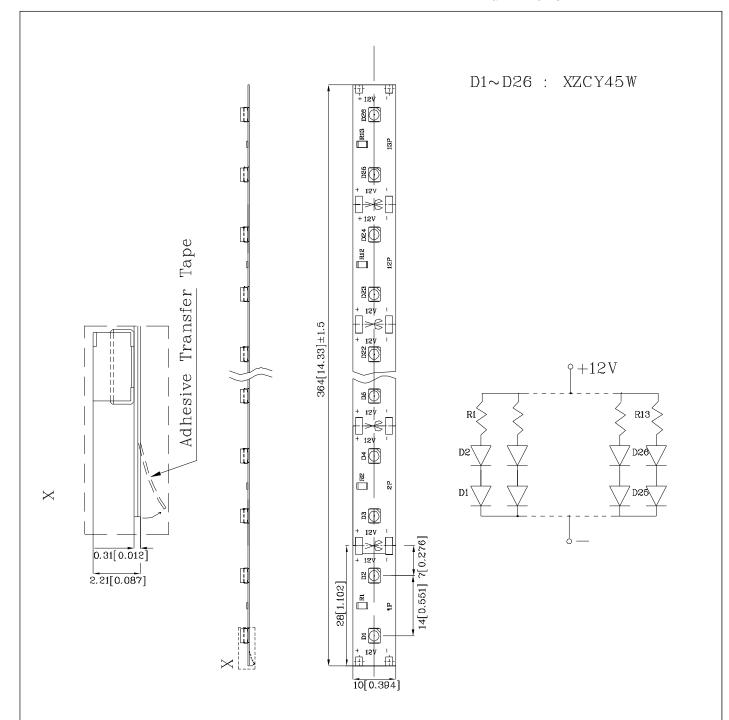
- Wiring connections should only be made on the designated soldering pads (marked "+/- 12V"). Soldering process should not exceed 10 seconds at 260°C.
- Module can be trimmed to the desired length by cutting along the marked line between the soldering pads.
- Each module has a maximum length of 364mm. A maximum of ten modules (or 3640mm in total module length) may be connected to one power supply. The power supply should be connected near the middle of the module strip (see figures on Page 4).
- The power supply should contain an appropriate fuse to insure the electrical current do not exceed maximum tolerance of the light modules.
- The module should not be exposed to humid or dusty environments. Additional protection may be necessary for
 use in harsh conditions.
- The minimum bend radius of the PCB is 2cm. Sharp bends should not be made near an LED or electronic component.
- The flexible PCB of the light module contains a self-adhesive backing which can be attached to different surfaces. The bonding surface should be dry and cleaned of oils, silicone, or dirt residue. The mounting surface should be mechanically strong enough to support the light module. The backing tape can be removed from the PCB and the exposed adhesive surface can be attached to the substrate by applying approximately 20 N/cm² of pressure. The modules should be handled according to safe anti-static procedures. The adhesive is not recommended for use on untreated wood surfaces.

Published Date : OCT 10, 2007 Drawing No : XDSB0053 V2 Checked : B.L.LIU P.1/5



LED LIGHT MODULE





Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.

Published Date : OCT 10, 2007 Drawing No : XDSB0053 V2 Checked : B.L.LIU P.2/5



LED LIGHT MODULE

Operating Data (TA=25°C)

Parameter	Symbol	Value	Unit
Colour of Emission	-	Yellow	-
Number of LEDS	-	26	PCS
Nominal Wavelength (typ)	λ dom	589	nm
Chromaticity coordinates according to CIE 1931(typ)	X	-	
	Y	-	-
Temperature coefficient of λ dom (typ)	$TC \; \lambda \; dom$	-	nm/°C
Temperature coefficient chromaticity coordinates (typ)	TCx	-	-
	TCY	-	-
Spectral line half-width (typ)	$\triangle\lambda1/2$	20	nm
Luminous Intensity (typ) (Per LED)	Iv	497	mcd
Temperature coefficient of luminous intensity (typ)	TCIV	-	%/°C
Viewing Angle (typ)(Per LED)	2ϕ	120	۰
Nominal operating voltage	VB	12	VDC
Operating Current (typ)	Ів	245	mA
Temperature coefficient of IB (typ)	ТСів	+0.06	%/°C
Nominal power consumption	Pnom	2.95	W
Weight (approx.)	M	4	g

Maximum Ratings

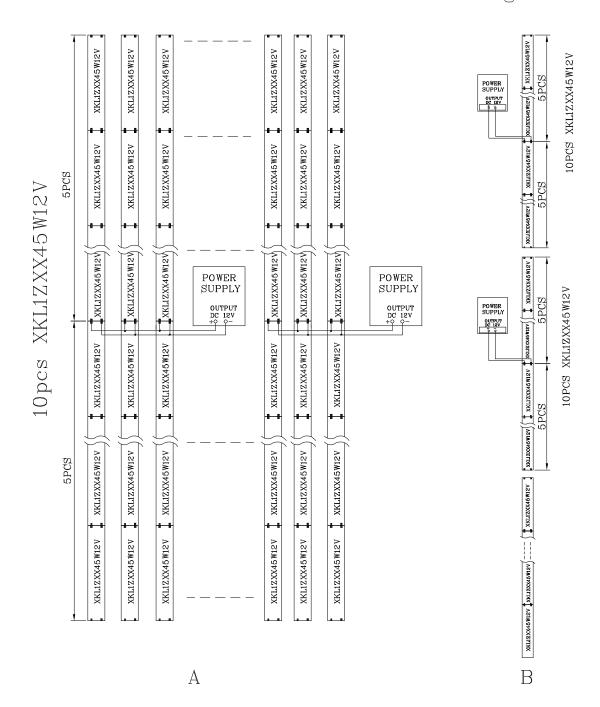
Parameter	Symbol	Value	Unit
Operating Temperature	TA	-25~+55	$^{\circ}\mathrm{C}$
Storage Temperature	TSTG	-25~+85	$^{\circ}\mathrm{C}$
Maximum current when connected in parallel	IBmax	2.5	A
Operating Voltage	V	+11~+13	VDC
Power Consumption	Ptot	3.5	W

Published Date : OCT 10, 2007 Drawing No : XDSB0053 V2 Checked : B.L.LIU P.3/5



LED LIGHT MODULE

Electrical Connection Schematic Diagram



Notes:

*Please ensure that the supply is of adequate power to operate the total load .We are recommend that the power supply should be exceed 30watt when connection up to ten full.

Published Date : OCT 10, 2007 Drawing No : XDSB0053 V2 Checked : B.L.LIU P.4/5



LED LIGHT MODULE

PACKING & LABEL SPECIFICATIONS LABEL 10PCS / BAG OUTSIDE LABEL 480/9# BOX XX. XXX PASSED P/NO: XKL1Zxxx45W12V FQC CODE: XXX QTY: 10pcs S/N : XXLOT NO:

Published Date: OCT 10, 2007 Drawing No: XDSB0053 V2Checked: B.L.LIUP.5/5

RoHS Compliant