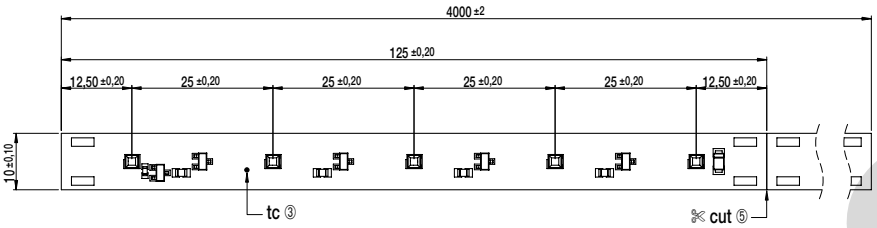
TALEXtape FP101

RoHS



Applications:
- safety lighting, general lighting, effect lighting and shelf lighting
- accenting lines and edges and for side injection
- edge lighting of transparent or diffuse materials
- suitable for use with TALEXprofile Z22W

Highlights:
- LED on flexible printed circuit board with adhesive tape
- low profile
- excellent thermal management ③

Properties:
- LED in SMD technology
- dimmable by pulse width modulation (PWM)
- colour temperature white: ④
  warm white (WW): 3.000 K, CRI >80
  neutral white (NW): 4.200 K, CRI >80
  daylight white (DL): 6.500 K, CRI >75
- integrated current source to stabilise luminous flux
- fixing: pre-mounted thermal conductive adhesive tape
- smallest unit (5LEDs) can be cut off at 125mm ⑤
- connection method: solder pads

Note:
- cooling required
- applying reversed polarity of the supply voltage may damage the TALEXtape
- none of the components of the TALEXtape (substrated, LED, electronic components etc.) may be exposed to tensile or compressice stresses
- only parallel connection allowed
- maximum length of TALEXXtape is 4m/8m with power feed at one end/ in the middle of two tapes
- for further information on installation please refer to the brochure entitled „TALEX installation instructions and guidelines“

Packaging:
4 meter per role

TALEX

type	article number	colour	colour temperature K ④	lightpoints	typ. luminous flux lm	Voltage V_{DC} ②	Power W ①	lenght L mm	ta °C	tc max °C ③	packing unit pieces/carton
FP101 DL	89600529	daylight white	6.500	160	3400	24	100	4000	-25 → +55	75	1
FP101 NW	89600528	neutral white	4.200	160	2600	24	100	4000	-25 → +55	75	1
FP101 WW	89600527	warm white	3.000	160	2340	24	100	4000	-25 → +55	75	1

all data for ta = 25 °C (except max tc)

① tolerance range for optical and electrical data: ±15 %
② Exceeding the maximum operating voltage leads to an overload on the TALEXtape.
This may in turn result in a significant reduction in lifetime or even destruction of the TALEXtape.
Tolerance range for the supply voltage: 24V: +2V/-0V
③ If the maximum temperature limits are exceeded, the life of the module will be greatly reduced or the module may be damaged.
The temperature of the TALEXtape at the tc point in the thermally stable state by means of a temperature sensor or temperature-sensitive sticker (available for example from www.conrad.com, www.rs-components.com) as per EN60598-1.
For the precise position of the tc point see the above diagram.
④ For colour temperatures and tolerances – see page 2
⑤ Cut see drawing

Thermal specification:

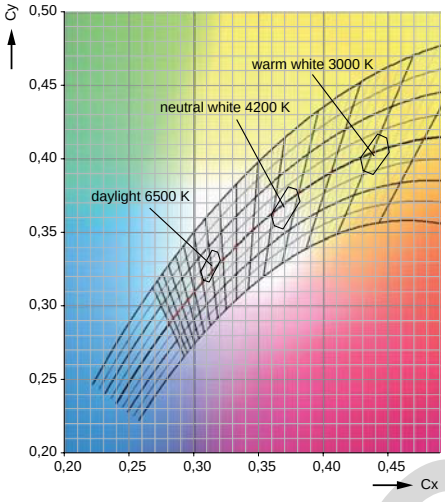
Values for aluminum >1mm thick, tc 75 °C, per unit

ta	$R_{th, hs-a}$	Cooling Area
25 °C	1.95 K/W	42.7 cm²
35 °C	1.55 K/W	53.73 cm²
45 °C	1.15 K/W	72.44 cm²
55 °C	0.75 K/W	111.15 cm²

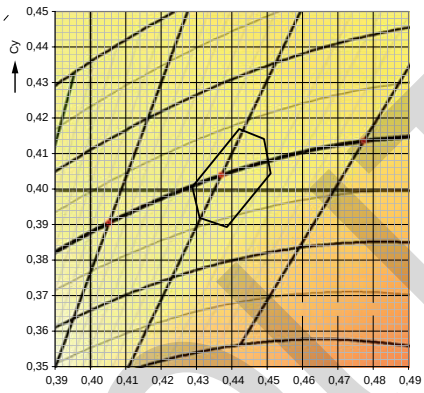
Values for aluminum >1mm thick, tc 75 °C, per 4m

ta	$R_{th, hs-a}$	Cooling Area
25 °C	1.95 K/W	1376 cm²
35 °C	1.55 K/W	1720 cm²
45 °C	1.15 K/W	2318 cm²
55 °C	0.75 K/W	3557 cm²

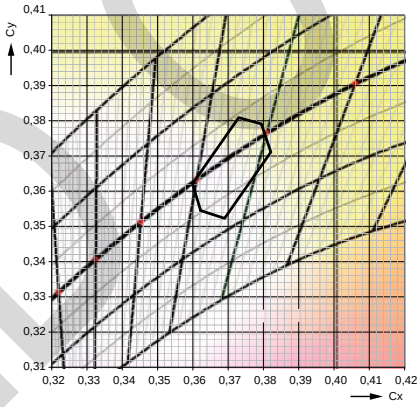
Colour temperatures and CIE coordinates



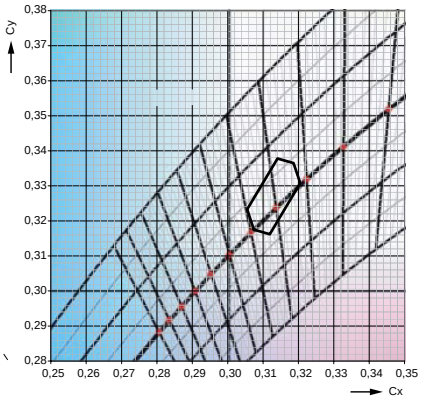
warm white 3000 K



neutral white 4200 K



daylight 6500 K



CIE coordinates: Tolerance area

warm white, 3,000 K

	Cx	Cy
tolerance area	0.4309	0.3919
	0.4288	0.4006
	0.4421	0.4169
	0.4491	0.4141
	0.4510	0.4044
	0.4386	0.3893

neutral white, 4,200 K

	Cx	Cy
tolerance area	0.3622	0.3545
	0.3599	0.3621
	0.3730	0.3809
	0.3794	0.3791
	0.3821	0.3711
	0.3690	0.3523

daylight white, 6,500 K

	Cx	Cy
tolerance area	0.3074	0.3175
	0.3055	0.3233
	0.3141	0.3378
	0.3186	0.3365
	0.3205	0.3308
	0.3119	0.3162