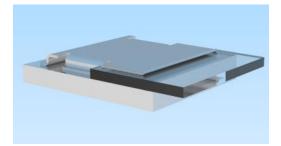
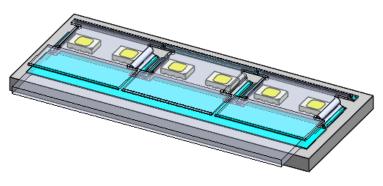


Surface Mounted Reflectors (SMR) 1mm Thin Film Coupler Family Datasheet Rev 1.0 – 06/01/23

### CoreLED P/N 11130

- 1mm Thin Film Coupler
  - Osram OSIRE E3323 RBG LED





### **Product Description:**

### 1mm Light Guide Surface Mounted Reflector / Thin Film Coupler

- Turns a top-emitting LED into side-emitting LED for coupling into thin film light guide applications. Provides excellent color mixing for RGBW LEDs and high uniformity output.
- This surface mounted reflector is reflow soldered directly onto the PCB during the reflow process (same process as LED component).
- Can be used with many automotive-approved top-emitting LEDs with high lumen output. Osram OSIRE E3323 RGB used in prototype parts currently available.
- Creates continuous lit output zone for emitted light thereby eliminating dark spots.
- Delivered as part of the standard tape and reel process for high-volume applications.
- Reflector is made of bronze metal and has three possible finish options: bright tin, matte tin or nickel tin.



1mm Thin Film Coupler Family Datasheet Rev 1.0 – 06/01/23

- Good fit for size-constrained low-profile packages. Part dimensions: 12mm x 10.48mm x 1.41mm. Fits with 1mm thick light guide/thin film. (Also available in 2mm Thin Film size).
- Provides mechanical protection for LEDs in thin applications.
- Creates a defined entry point/stop for mechanical alignment/attachment to light guide.
- Can be arranged in a linear array.

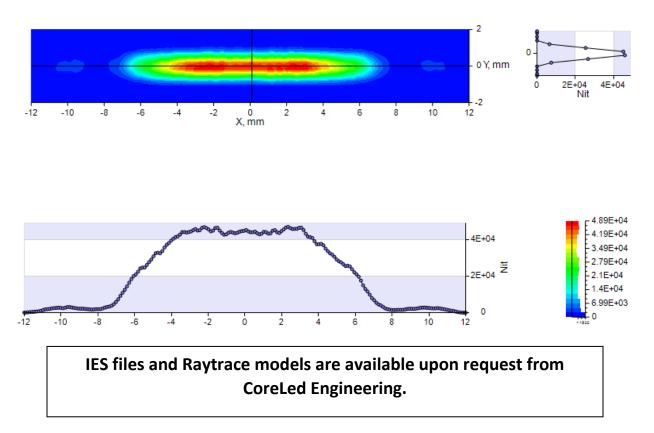
### **Input Coupling Pattern Profile**

### Oslon OSIRE E3323 RGB (Simulated)

Lit Appearance on Half-Inch Plane

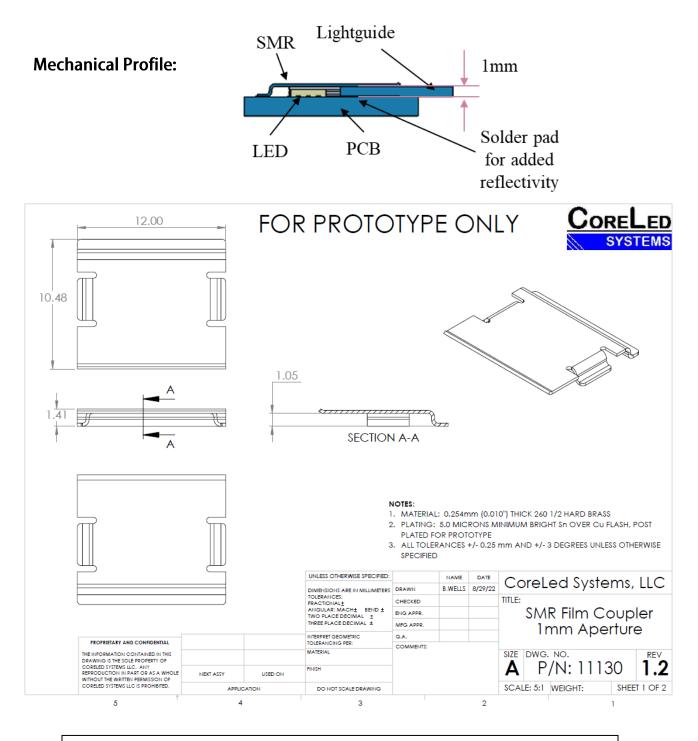
#### Result shown for bright tin finish

15-25% Coupling Efficiency (depending on height of LED)





1mm Thin Film Coupler Family Datasheet Rev 1.0 – 06/01/23



CAD files available upon request from CoreLed Engineering



1mm Thin Film Coupler Family Datasheet Rev 1.0 – 06/01/23

#### **LED** Information

### KRTBDWLM32.32

#### **OSIRE® E3323**

The OSIRE E3323 is designed for automotive ambient applications. With its compact size, the device offers a maximum of flexibility for various assembly situations.

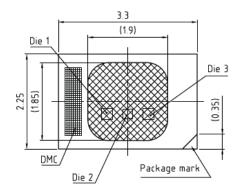
All measurement data of every single LED is made available at 10 and 50 mA via an imprinted data matrix code. This feature helps to reduce the optical measurement effort on customer side.

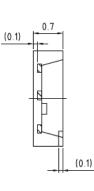


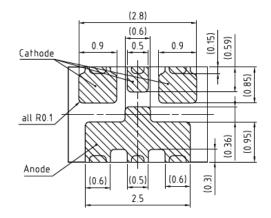
#### **Ordering Information**

Туре	Brightness IF = 10 mA	Ordering code
KRTBDWLM32.32-T4U6-JW+AAAB-J3+R4S6-5V		Q65112A7940
red	IV = 315 ··· 800 mcd	
true green	IV = 1120 ··· 1800 mcd	
blue	IV = 125 ··· 320 mcd	

#### Dimensional Drawing 8)





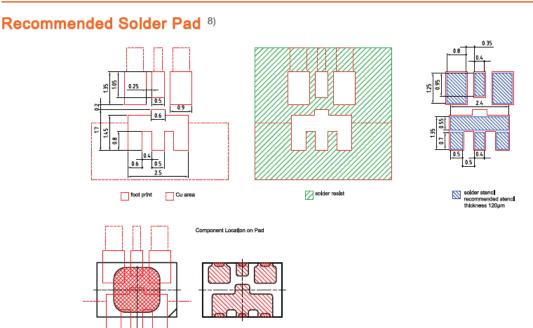




1mm Thin Film Coupler Family Datasheet Rev 1.0 – 06/01/23

### **LED** Information

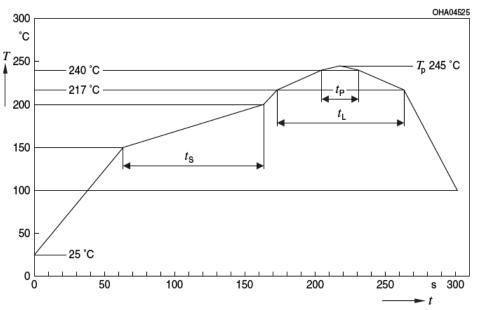
KRTBDWLM32.32



E062.3010.245 -02

#### **Reflow Soldering Profile**

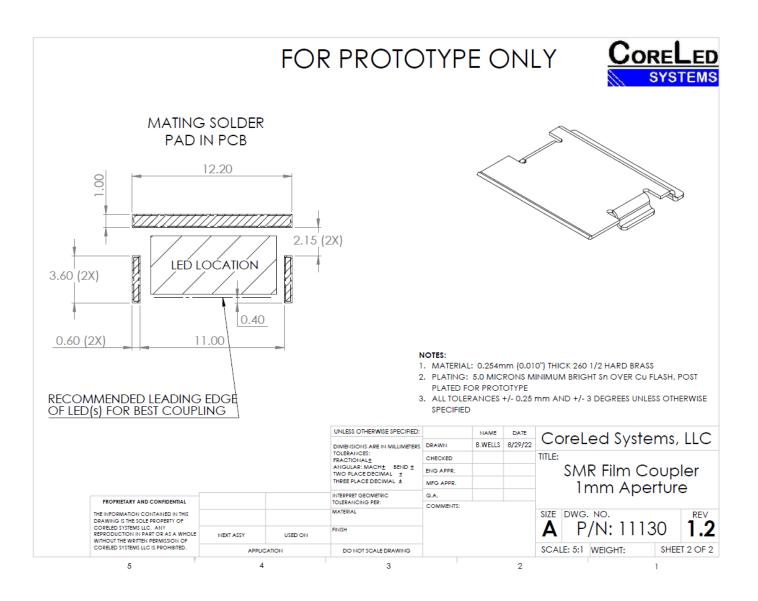
Product complies to MSL Level 2 acc. to JEDEC J-STD-020E





1mm Thin Film Coupler Family Datasheet Rev 1.0 – 06/01/23

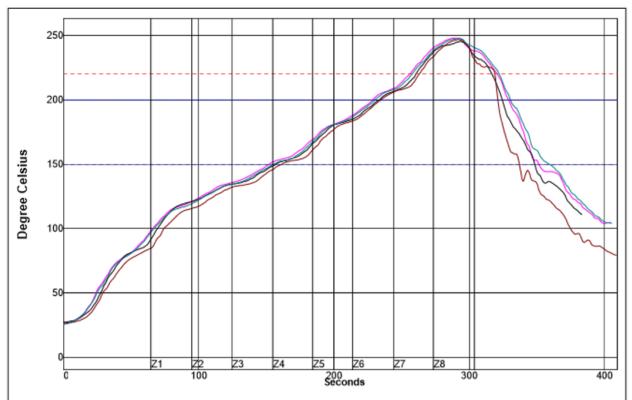
Solder Pad Drawing:





1mm Thin Film Coupler Family Datasheet Rev 1.0 – 06/01/23

**Reflow Profile:** 



Setpoints (Degree Celsius)									
Zone	1	2	3	4	5	6	7	8	
Тор	125	148	152	173	210	235	268	257	
Bottom	125	148	152	173	210	235	268	257	
Conveyor Speed	50	50.0 cm/min						•	

### Example Reflow profile used for testing of SMR units by CoreLed



1mm Thin Film Coupler Family Datasheet Rev 1.0 – 06/01/23

#### Packaging:

#### Tape & Reel

