

### Features

- High speed phototransistor OL8110 chips
- Reference holes for precise mounting
- Compact size and low cost
- Custom design available
- Single chip placement for high speed applications



### Application

- Optical Encoders (absolut, incremental, multi turn)
- Edge detection for paper
- Multi Element Sensor Array

### Absolute Maximum Ratings

Storage and Operating Temperature	-35 to +85 °C (*)
Solder Temperature (Vapor Phase Reflow for 30 sec)	235 °C

(\*) Military Temperature range available on request

### Electrical Specifications ( $T_A = 25^\circ\text{C}$ )

- Parameters 100% tested at waferprobe

Parameter	Units	Min	Typ	Max
$I_{CE0}$ @ 52.0 V	$\mu\text{A}$		0.1	100.0
$I_{DARK}$ @ 32.0 V	nA		1.0	100.0
$I_{EC0}$ @ 7.7 V	$\mu\text{A}$		0.1	100.0
$V_{CEst}$ ( $I_C = 2.0 \text{ mA}$ , $I_B = 22.2 \mu\text{A}$ )	mV		290.0	400.0
HFE ( $I_C = 2.0 \text{ mA}$ , $V_{CE} = 5.0 \text{ V}$ )		500.0	750.0	1000.0

### Additional Parameters tested for qualification and on a lot sample basis

- Rise time: 10.0  $\mu\text{s}$  ( $V_{CC} = 5.0 \text{ V}$ ,  $R_L = 1.2 \text{ k}\Omega$ ,  $C_L = 8.0 \text{ pF}$ ,  $V_E(\text{peak}) = 1.0 \text{ V}$ )
- Fall time: 13.0  $\mu\text{s}$  ( $V_{CC} = 5.0 \text{ V}$ ,  $R_L = 1.2 \text{ k}\Omega$ ,  $C_L = 8.0 \text{ pF}$ ,  $V_E(\text{peak}) = 1.0 \text{ V}$ )
- Responsivity peak wavelength: 880 nm

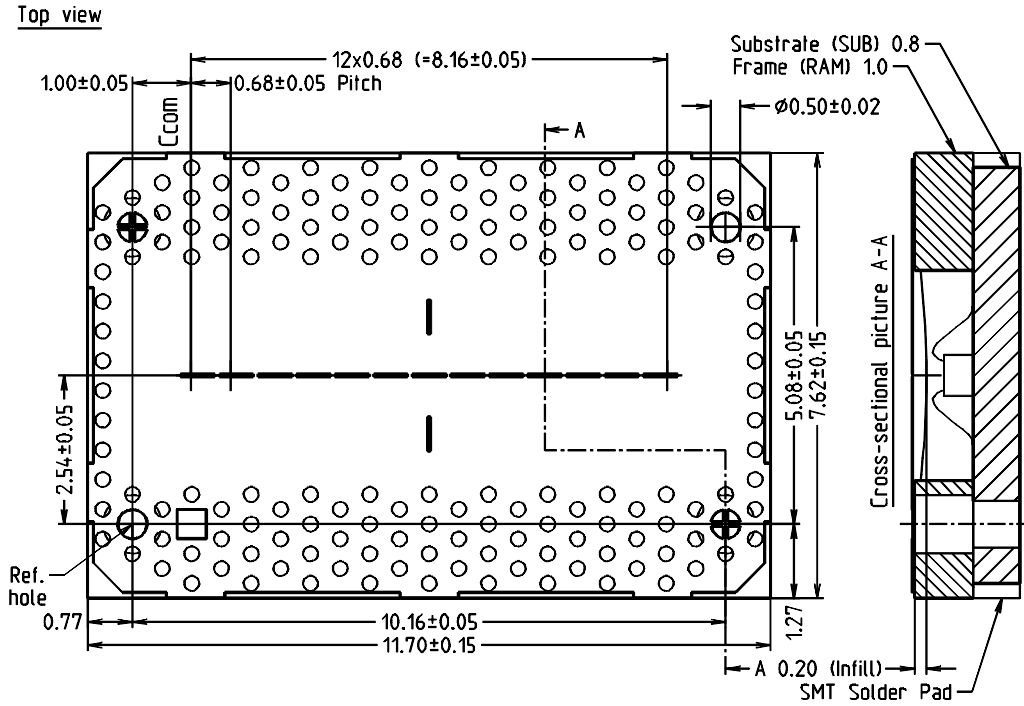
### Note

Please see part **ET8001**, precision schmitt trigger and comparator array with hysteresis tracking function for use with this phototransistor array.

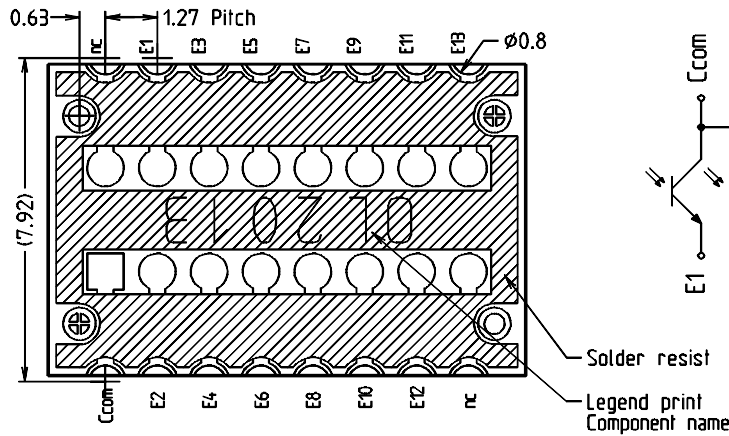
# OL2013R

13 Element SMD Phototransistor Array

www.DataSheet4U.com



**Bottom view**



Chip type:  
OL-8110 (13x) Phototransistor  
Chip thickness: 178 - 254µm