

Si-NPN - Photo transistor - type FT-18

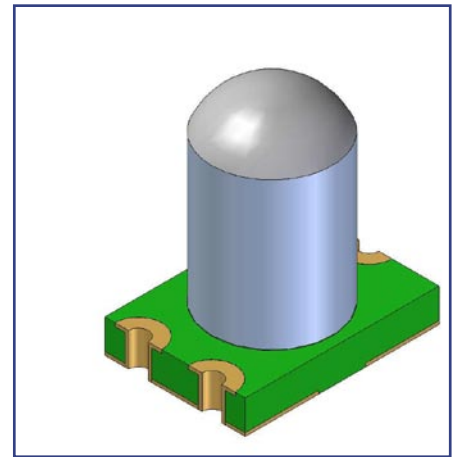


CHARACTERISTICS

- ▶ Integrated, coordinated high-efficiency optics
- ▶ No additional lenses required
- ▶ Extremely small reception and squint angles
- ▶ 1,8mm model, metal housing

APPLICATION

- ▶ For all optical sensors



▶ **ELECTRONIC VALUES**

| Parameter | Test conditions | typ. value | Unit |
|--|-----------------------------|----------------|------|
| Dark current I_{ceo} | $V_{ce}=20V$; $H=0mW/cm^2$ | < 100 | nA |
| Collector-emitter saturation voltage V_{cesat} | $I_c=2mA$; $I_b= 100\mu A$ | <0,3 | V |
| Collector-emitter -breakout (U_{ceo}) | $I_c=100\mu A$; $I_b=0$ | >60 | V |
| Spectral sensitivity | 650nm 875nm 940nm | 50 93 55 | A/W |
| Emitter- Collector breakout (V_{eco}) | $I_e=100\mu A$; $I_b=0$ | >5 | V |
| Supply voltage | | +0...+30 | V |

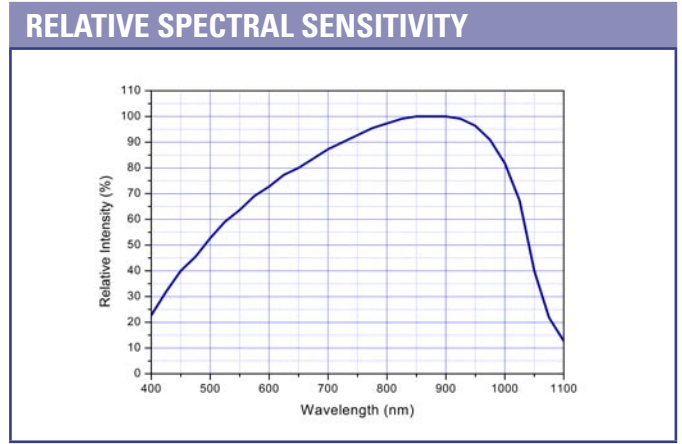
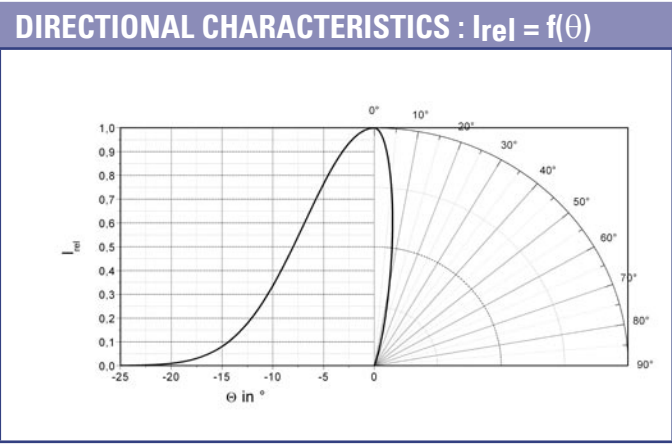
▶ **TYPICAL VALUES**

| Parameter | Test conditions | typ. value | Unit |
|---|---|------------|------------------------|
| Spectral range of sensitivity | | 400-1000 | nm |
| Rise and fall time of the photocurrent t_r t_f | 10%-90% ; $I_c=1mA$, $V_{ce}=5V$; $R_I=1k\Omega$ | 15 15 | μsec μsec |
| Storage temperature | | -55...+125 | $^{\circ}C$ |
| Operating temperature | | -40...+85 | $^{\circ}C$ |
| Dimensions of radiant sensitive area (A) | | 0,11 | mm^2 |
| Half power angle (θ) | | 8 | deg |

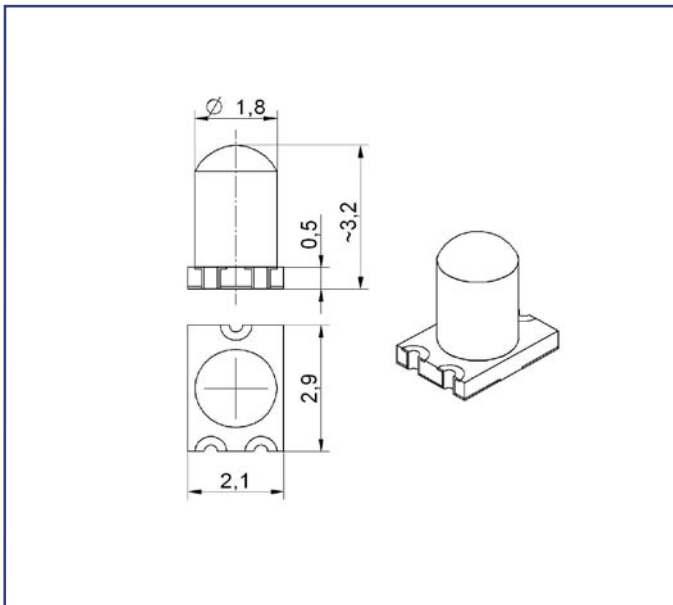


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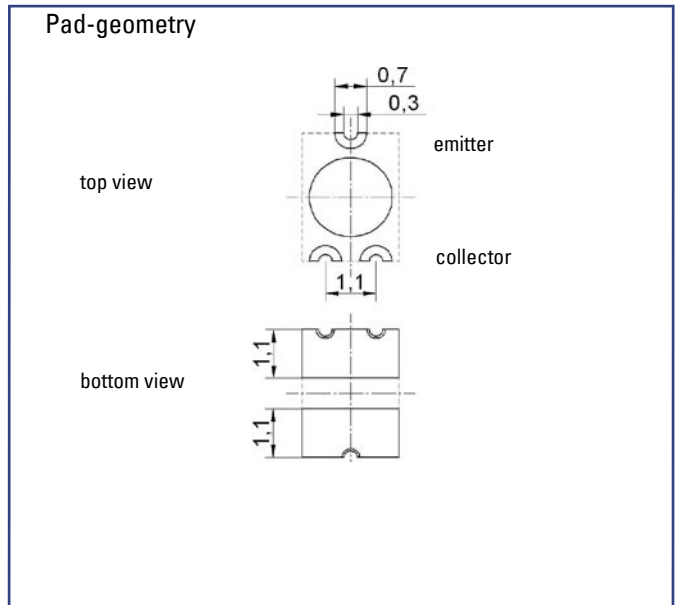
► **GRAPHS**



► **DIMENSIONS**



► **CONNECTOR PIN-ASSIGNMENT**



PART DESIGNATION

OE-FT-18-VA1-SL20-2-0110