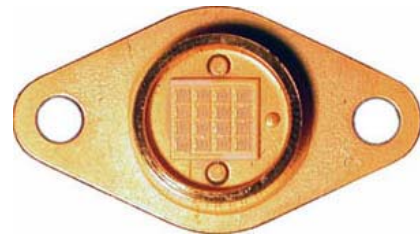
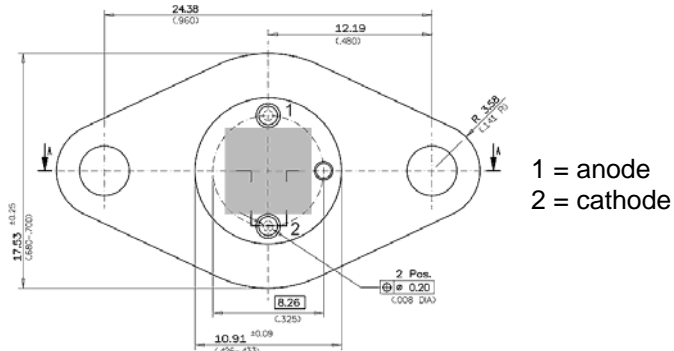


LED940-4x4PC66

TECHNICAL DATA

SUPER HIGH POWER INFRARED LED

Structure: **GaAs, 16 power LED chips, 4 x 4 array**
 Peak Wavelength: **typ. 940 nm**
 Optical Output Power: **typ. 600 mW cw @ 1 A**
 Package: **TO-66 stem with silicone resin**



Absolute Maximum Ratings (T_c = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|----------------------------|------------------|------------|------|
| Power dissipation | P _D | 20 | W |
| DC forward current **) | I _F | 1.4 | A |
| Pulse forward current *) | I _{FP} | - | A |
| Reverse voltage | V _R | 5 | V |
| Operating lifetime | T | 50.000 | h |
| Operating case temperature | T _{OP} | -30 .. +70 | °C |
| Storage temperature | T _{STG} | -60 .. +85 | °C |

*) Pulse width ≤ 10 μs, f ≤ 500 Hz

Optical-Electrical Characteristics (T_c = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN | TYP | MAX | UNIT |
|---------------------|-------------------------|----------------------|-----|-----|-----|------|
| Radiant flux | θ _e (940 nm) | I _F = 1 A | 580 | 600 | 650 | mW |
| Luminous flux | θ _v (940 nm) | I _F = 1 A | - | - | - | lm |
| Luminous intensity | I _v (940 nm) | I _F = 1 A | - | - | - | cd |
| Forward voltage | V _F | I _F = 1 A | 4.9 | 5.2 | 6.0 | V |
| Reverse current | I _R | V _R = 5 V | | | 10 | μA |
| Peak wavelength | λ _P | I _F = 1 A | 930 | 940 | 950 | nm |
| Spectrum half width | Δλ | I _F = 1 A | | 66 | | nm |
| Emission angle FWHM | θ _{1/2} | I _F = 1 A | | ±60 | | ° |

IMPORTANT NOTE FOR SAFE OPERATION

This high power LED must be cooled! **) Use a heat sink with a thermal resistance ≤8K/W. Maximum uncooled allowed operation current ≤80 mA. Do not view directly into the emitting area of the LED when in operation!



ROITHNER LASERTECHNIK

SCHOENBRUNNER STRASSE 7, 1040 VIENNA, AUSTRIA
 TEL: +43 -1- 586 52 43-0 FAX: +43 -1- 586 52 43-44
 office@roithner-laser.com www.roithner-laser.com