

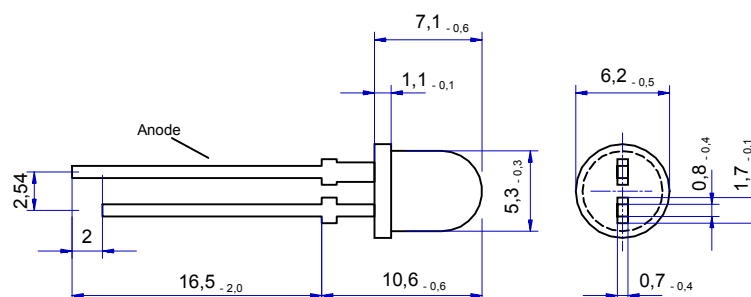
| Radiation | Type        | Technology       | Case              |
|-----------|-------------|------------------|-------------------|
| infrared  | ELD-950-545 | AlGaAs/GaAs/GaAs | 5 mm plastic lens |

**Description**

High-power, high-speed,  
heterostructure,  
with stand off lead

**Applications**

Optical communications,  
safety equipment



Note: Special packages without stand off available on request

**Maximum Ratings**

$T_{amb} = 25^{\circ}\text{C}$ , unless otherwise specified

| Parameter                   | Test Conditions                          | Symbol    | Value       | Unit               |
|-----------------------------|------------------------------------------|-----------|-------------|--------------------|
| Forward current (DC)        |                                          | $I_F$     | 100         | mA                 |
| Peak forward current        | $(t_P \leq 50 \mu\text{s}, t_P/T = 1/2)$ | $I_{FM}$  | 200         | mA                 |
| Surge forward current       | $(t_P \leq 10 \mu\text{s})$              | $I_{FSM}$ | 2000        | mA                 |
| Reverse voltage             | $I_R = 100 \mu\text{A}$                  | $V_R$     | 5           | V                  |
| Operating temperature range |                                          | $T_{amb}$ | -20 to +100 | $^{\circ}\text{C}$ |
| Storage temperature range   |                                          | $T_{stg}$ | -55 to +100 | $^{\circ}\text{C}$ |
| Weight                      |                                          |           | 0.33        | g                  |

**Optical and Electrical Characteristics**

$T_{amb} = 25^{\circ}\text{C}$ , unless otherwise specified

| Parameter                 | Test Conditions        | Symbol                | Min | Typ | Max | Unit |
|---------------------------|------------------------|-----------------------|-----|-----|-----|------|
| Forward voltage           | $I_F = 100 \text{ mA}$ | $V_F$                 |     | 1.5 |     | V    |
| Radiant power             | $I_F = 100 \text{ mA}$ | $\Phi_e$              |     | 32  |     | mW   |
| Peak wavelength           | $I_F = 100 \text{ mA}$ | $\lambda_p$           |     | 950 |     | nm   |
| Spectral bandwidth at 50% | $I_F = 100 \text{ mA}$ | $\Delta\lambda_{0.5}$ |     | 50  |     | nm   |
| Viewing angle             |                        | $\phi$                |     | 40  |     | deg. |
| Switching time            | $I_F = 100 \text{ mA}$ | $t_r, t_f$            |     | 500 |     | ns   |