

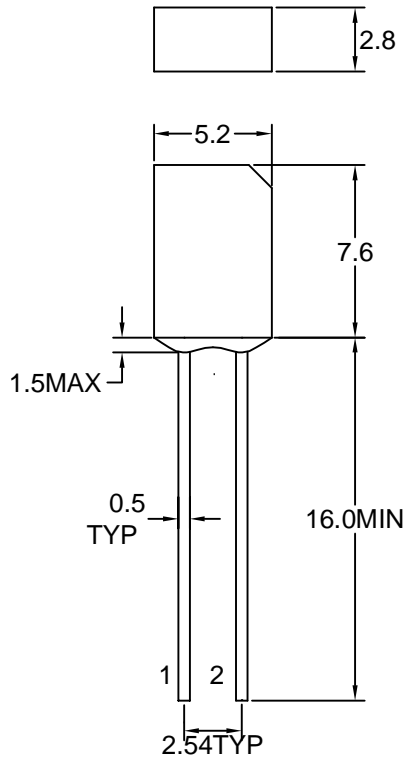


PHOTO DIODE SILICON PIN LED LAMPS

LPD6380

SERIES

Package Dimension



1.ANODE
2.CATHODE

Description

The LPD6380 series are silicon planar P/N photodiodes incorporated in plastic package that simultaneously serve as filter and are also Transparent for infrared emission their terminals are soldering tabs arranged in 2.54mm center to center spacing due to their design the diodes can vertically be assembled on pc boards arrays can be realized by multiple arrangement versatile photodetectors are suitable for diodes as well as voltaic cell operation the signal noise ratio is particularly favorable even at low illuminance the P/N photodiode are outstanding for low junction capacitance high cut-off frequency and fast switching times.

They are particularly suitable for IR sound transmission and remote control the cathode of LPD6380 photodiode is marked by a stamping on the package edge

NOTE:1.All dimension are in millimeters tolerance is ± 0.25 unless otherwise noted
2.Specifications are subject to change without notice

MAXIMUM RATINGS (TA=25)

| Characteristic | Symbol | Rating | Unit |
|----------------------------|-----------|-----------|------|
| Reverse Break Down Voltage | V_{BR} | 30 | V |
| Power Dissipation | PD | 150 | mW |
| Operating Temperature | T_{opr} | -30 - +60 | |
| Storage Temperature | T_{stg} | -40 - +60 | |

ELECTRICAL CHARACTERISTICS AT (TA=)

| Characteristic | Symbol | Test Condition | Min | Typ | Max | Unit |
|------------------------------------|-----------------|--|-----|-----|-----|---------|
| Dark Current | I_D | $V_R=10V \quad E_e=0mW/cm^2$ | - | 1.0 | 30 | nA |
| Short Circuit Current | I_{sc} | $V_R=5V \quad P=940nm$ $E_e=0.5mW/cm^2$ | 1.5 | 2.0 | - | μA |
| Open Circuit Voltage | V_{oc} | $P=940nm$ $E_e=0.5mW/cm^2$ | - | 350 | - | mV |
| Total Capacitance | C_T | $V_R=3V \quad f=1MHZ \quad E_e=0mW/cm^2$ | - | 20 | - | pF |
| Peak Wavelength of Max Sensitivity | λ_{max} | | - | 940 | - | nm |
| Rise Time,Fall Time | t_r, t_f | $V_R=10V \quad R_L=1K$ | - | 50 | - | ns |