IRT1
Infrared Pulse Transmitter

General description

The IRT1 is an hybrid circuit that allows to realize an infrared barrier when utilized with an infrared pulse detector (IRD1).

It shows stable electric characteristics thanks to the "Thick film hybrid" teknology.

Features
- High RFI Immunity
- SIL Package

Applications
- Residential and commercial security systems
- Automatic doors opening systems

BLOCK DIAGRAM
**Electrical Characteristics**

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>MIN</th>
<th>TYP</th>
<th>MAX</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>$V_{cc}$ Supply Voltage</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>VDC</td>
</tr>
<tr>
<td>$I_s$ Supply Current</td>
<td></td>
<td>35</td>
<td></td>
<td>mA</td>
</tr>
<tr>
<td>$F_{ir}$ Infrared Pulse Frequency</td>
<td>300</td>
<td>400</td>
<td></td>
<td>Hz</td>
</tr>
<tr>
<td>$T_p$ Pulse Width</td>
<td></td>
<td>40</td>
<td></td>
<td>µsec</td>
</tr>
<tr>
<td>$T_{op}$ Operating Temperature Range</td>
<td>-20</td>
<td>+80</td>
<td></td>
<td>°C</td>
</tr>
</tbody>
</table>

*Ta = 25°C unless otherwise specified*

**Pin Description**

1. GND Ground
2. $V_{cc}$ Supply Voltage
3. IRED Infrared Emitting Diode

**Mechanical Dimensions**

- Components Side: 12.7 mm, 16.9 mm, 1 mm, 2.54 mm

**Typical Application**

1. IRT1 Infrared Emitting Diode
2. Photodiode
3. IRD1 Infrared Pulse Detector

IRD1 = Infrared Pulse Detector (see Data Sheet)

Component typical values

**HEAD OFFICE & PLANT**

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