Electronic totalizer

N 100

Order designation

Resetting

1A Electrical only
2A Electrical and key

N 100. 2

Characteristics of device

Technology: CMOS
Functions: Totalizer
Manual and/or electrical reset

Mechanical data

Display: 8-digit LC-display, 8-digit display of real value, 8 mm high
Counting range up to 99999999
Suppression of leading zero
Key for resetting

Operation, keypad

Front dimensions: 48 x 21 mm
By soldering into PC-board or with tapping screw

Fastening

Weight: ca. 11 g

Housing material: Polycarbonate black, UL 94V - 0

Dimensions and cutout size

Bore hole for tapping screw ST 2.9

14 x 2.54 = 35.56
N 100

Ambient conditions

Ambient temperature
- 10 °C ... + 50 °C

Storage temperature
- 25 °C ... + 70 °C

Relative humidity
Max. rel. humidity 80 %, at 25 °C, non-condensing

Protection
Front IP 40 to DIN 40050

Electrical data

Supply voltage
2.7 ... 4 VDC

Closed-circuit consumption
<15 µA, with open-circuited inputs

Signal inputs
PNP / NPN

Pin assignments

Electronic triggering, for high counting speed max. 7 kHz

Electronic triggering or contact, for low counting speed max. 40 Hz

Signal inputs

At max. counting speed ≤ 7 kHz, PNP

<table>
<thead>
<tr>
<th>Input logic</th>
<th>Signal input Pin 1</th>
<th>Reset R</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNP</td>
<td>≥ 72 µs / ≥ 72 µs</td>
<td>≥ 12 ms</td>
</tr>
<tr>
<td>Pulse time / Pulse interval</td>
<td>≤ Vss + 0.65 V</td>
<td>≤ Vss + 0.26 V</td>
</tr>
<tr>
<td>Operating thresholds</td>
<td>≥ Vdd - 0.25 V</td>
<td>≥ Vdd - 0.5 V</td>
</tr>
<tr>
<td>V_{st} ≥ 0.5 V</td>
<td>Vss - 0.3 V</td>
<td>Vss - 0.3 V</td>
</tr>
<tr>
<td>Level limits</td>
<td>≤ Vdd + 0.3 V</td>
<td>≤ Vdd + 0.3 V</td>
</tr>
<tr>
<td>Control current</td>
<td>≤ 52 µA</td>
<td>≤ 2.6 µA</td>
</tr>
<tr>
<td></td>
<td>(max. 122 µs ≤ 82 µA)</td>
<td></td>
</tr>
</tbody>
</table>

At max. counting speed ≤ 40 Hz, NPN

<table>
<thead>
<tr>
<th>Input logic</th>
<th>Signal input Pin 2</th>
<th>Reset R</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPN</td>
<td>≥ 12 µs / ≥ 12 µs</td>
<td>≥ 12 ms</td>
</tr>
<tr>
<td>Pulse time / Pulse interval</td>
<td>≤ Vss + 0.2 V</td>
<td>≤ Vss + 0.26 V</td>
</tr>
<tr>
<td>Operating thresholds</td>
<td>≥ Vdd - 0.5 V</td>
<td>≥ Vdd - 0.5 V</td>
</tr>
<tr>
<td>Level limits</td>
<td>≥ Vss - 0.3 V</td>
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<tr>
<td>≤ Vdd + 0.3 V</td>
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