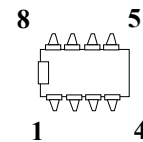# УР1101ХП24, УР1101ХП24А

**(U642B)**

## INTERVAL AND WIPE/WASH WIPER CONTROL IC

### Description

The IC УР1101ХП24 is used for providing intermittent operation and wipe/wash operation of windshield wiper. The IC has a feedback circuit from the wiper motor's park switch. IC works directly on a winding of the relay. IC has internal interference protection according to VDE 0839.
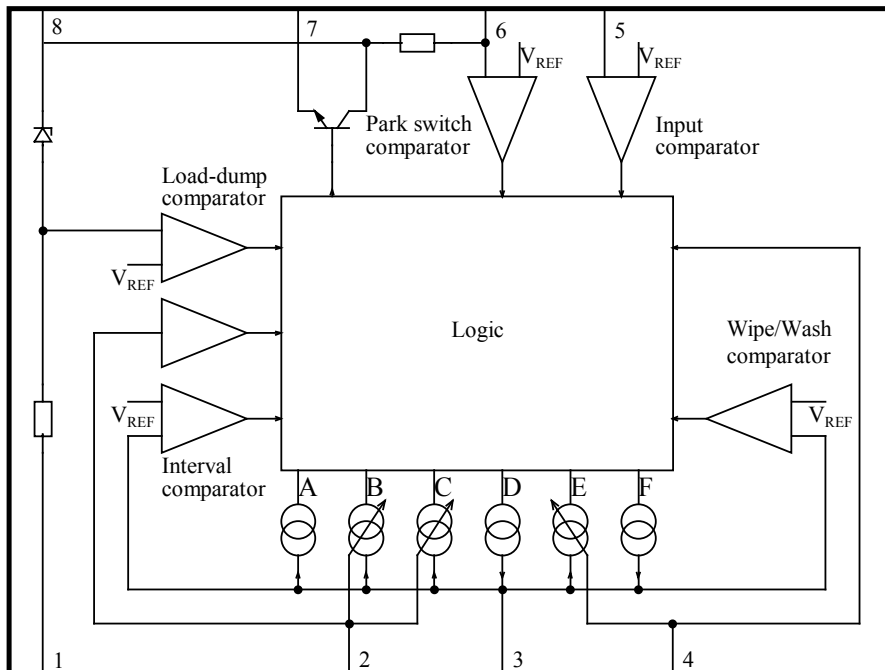
**8** ⬜⬜⬜⬜ **5**

**1** ⬜⬜⬜⬜ **4**

**DIP-8**
**SO-8**

### Features

- Supply Voltage 10.8 – 15 V
- Output current 250 mA
- Interval pause: 4 to 20 s
- Afterwiping time: 2 to 20 s
- Wiper motor's park switch
- Wipe/wash mode priority

- One external capacitor, determines all time sequences
- Interference protection according to VDE 0839 or ISO/TR 7637/1
- Overvoltage threshold 35 V
- Operating Temperature Range –45…85$^0$C

### Block Diagram



### Pin configuration

| Pin | Pin function |
|-----|--------------|
| 1 | Ground |
| 2 | Interval switch |
| 3 | Timing capacitor Ct |
| 4 | Afterwiping time resistance |
| 5 | Wipe/Wash switch |
| 6 | Park switch for wiper motor |
| 7 | Relay control output |
| 8 | Supply voltage |

## ELECTRICAL SPECIFICATION ($T_A = 25\,^{0}C$)

| The name of parameter | | Units | Symbol | Min. | Max. | Conditions |
|---|---|---|---|---|---|---|
| 1. Saturation voltage | | V | $U_{DS3}$ | - | 1,3 | $V_{CC}$=15V |
| 2. Quiescent current | | mA | Icc | - | 18 | $V_{CC}$=15V |
| 3. Interval time | | s | $t_{INT}$ | -<br>4.0 | 5.0<br>- | $V_{CC}$=10.8÷15V |
| 4. After-wipe-time | | s | $t_{WIW}$ | 4.0<br>- | -<br>5.0 | $V_{CC}$=10.8÷15V |
| 5. Switch-on time | УР1101ХП24 | s | $t_{DON}$ | - | 0.13 | $V_{CC}$=10.8÷15V |
| | УР1101ХП24А | | $t_{DON}$ | 0.25 | 0.4 | $V_{CC}$=10.8÷15V |

## Application Circuit