

# Octal D-Type Flip-Flop with 3-STATE Outputs

## 74VHC574

TSSOP20, 4.4x6.5  
 CASE 948AQ

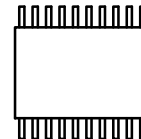
### General Description

The VHC574 is an advanced high speed CMOS octal flipflop with 3-STATE output fabricated with silicon gate CMOS technology. It achieves the high speed operation similar to equivalent Bipolar Schottky TTL while maintaining the CMOS low power dissipation. This 8-bit D-type flip-flop is controlled by a clock input (CP) and an output enable input ( $\overline{OE}$ ). When the  $\overline{OE}$  input is HIGH, the eight outputs are in a high impedance state.

An input protection circuit ensures that 0 V to 5.5 V can be applied to the input pins without regard to the supply voltage. This device can be used to interface 5 V to 3 V systems and two supply systems such as battery back up. This circuit prevents device destruction due to mismatched supply and input voltages.

### Features

- High Speed:  $t_{PD} = 5.6 \text{ ns}$  (Typ) at  $V_{CC} = 5 \text{ V}$



Functional Description

74VHC574

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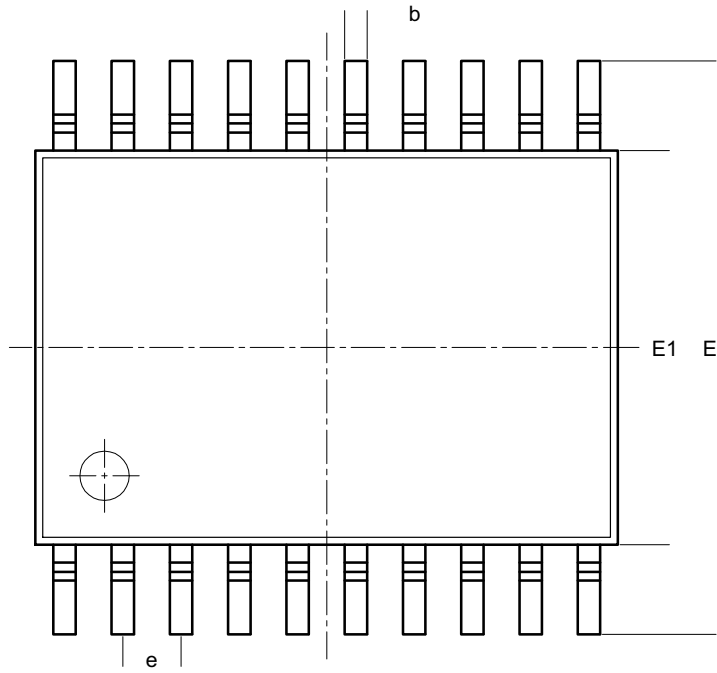
## AC ELECTRICAL CHARACTERISTICS

| Symbol | Parameter | Conditions | V <sub>CC</sub> (V) |
|--------|-----------|------------|---------------------|
|--------|-----------|------------|---------------------|

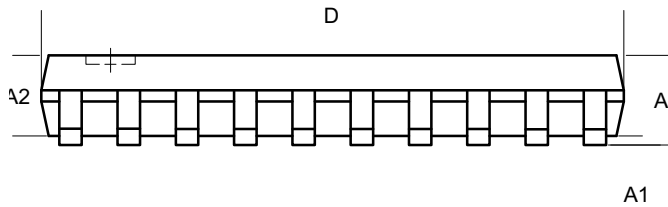
T<sub>A</sub>

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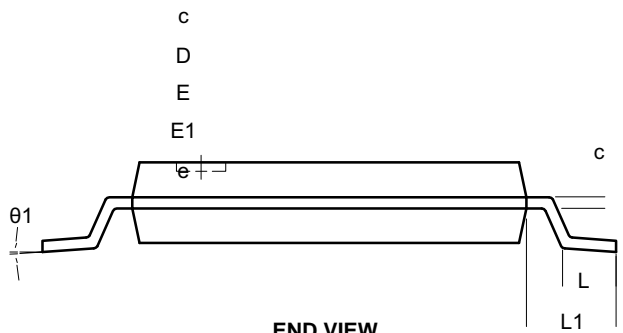


TOP VIEW



SIDE VIEW

| SYMBOL   | MIN | NOM | MAX |
|----------|-----|-----|-----|
| A        |     |     |     |
| A1       |     |     |     |
| A2       |     |     |     |
| b        |     |     |     |
| c        |     |     |     |
| D        |     |     |     |
| E        |     |     |     |
| E1       |     |     |     |
| e        |     |     |     |
|          |     |     |     |
| L1E1A2   |     |     |     |
| $\theta$ |     |     |     |



END VIEW

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