

# 54AC174/54ACT174

## Hex D Flip-Flop with Master Reset

### General Description

The 'AC/'ACT174 is a high-speed hex D flip-flop. The device is used primarily as a 6-bit edge-triggered storage register. The information on the D inputs is transferred to storage during the LOW-to-HIGH clock transition. The device has a Master Reset to simultaneously clear all flip-flops.

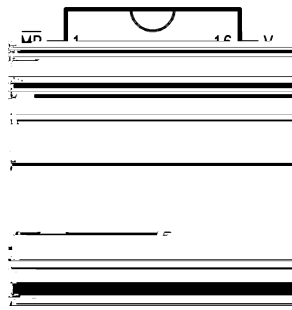
- 'ACT174 has TTL-compatible inputs
- Standard Microcircuit Drawing (SMD)
  - 54AC174: 5962-87626
  - 54ACT174: 5962-87757
- 54AC174 now qualified to 300Krad RHA designation, refer to the SMD for more information

### Features

- $I_{CC}$  reduced by 50%
  - Outputs source/sink 24 mA
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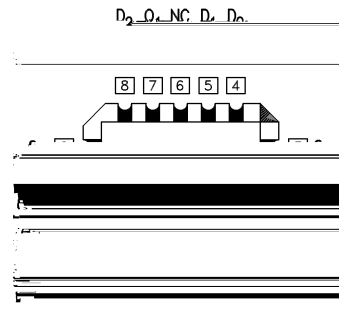
## Connection Diagrams

Pin Assignment  
for DIP and Flatpak



10027703

Pin Assignment  
for LCC



10027704

## Functional Description

The 'AC/ACT174 consists of six edge-triggered D flip-flops with individual D inputs and Q outputs. The Clock (CP) and Master Reset ( $\overline{MR}$ ) are common to all flip-flops. Each D input's state is transferred to the corresponding flip-flop's output following the LOW-to-HIGH Clock (CP) transition.

LOW-43132[(input)43132[(the)43132[(Master)43132[(Reset)43132[(MR))43132[wiall)43132[(foche)43132[aall

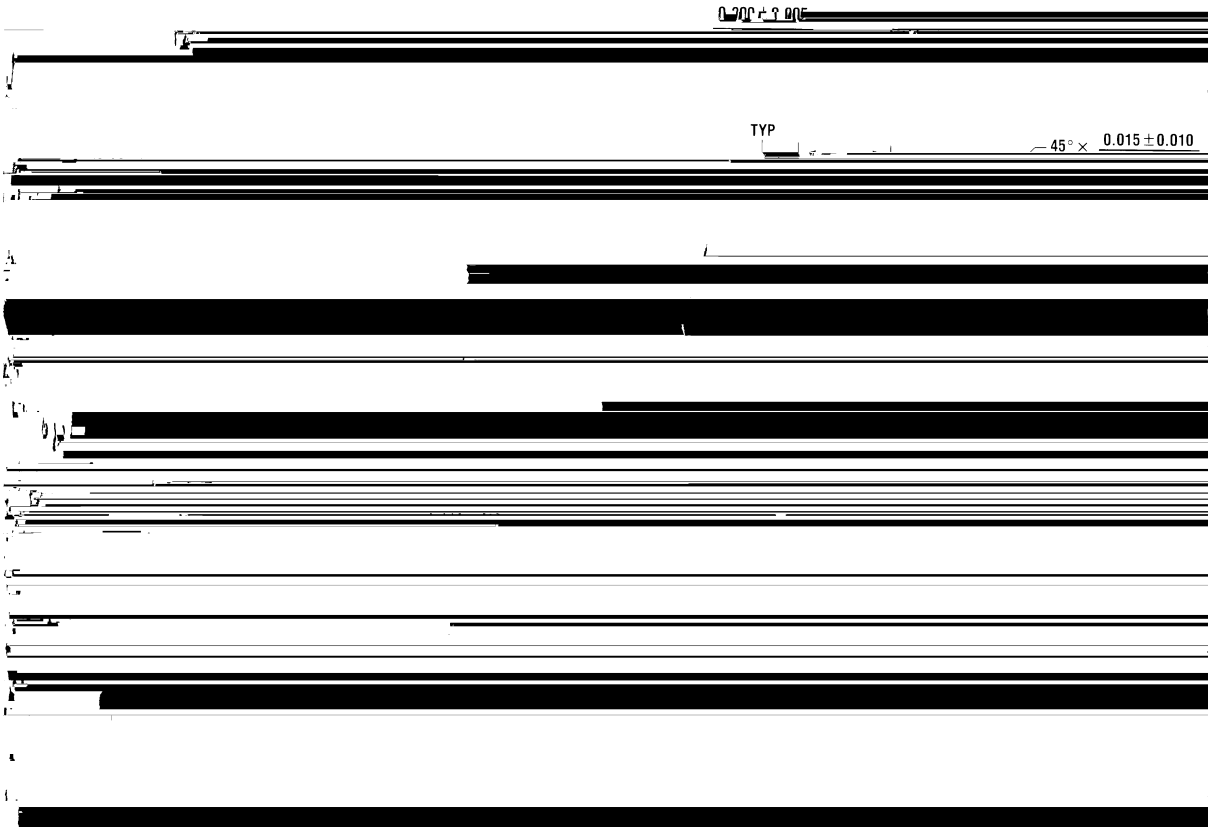
## Absolute Maximum Ratings



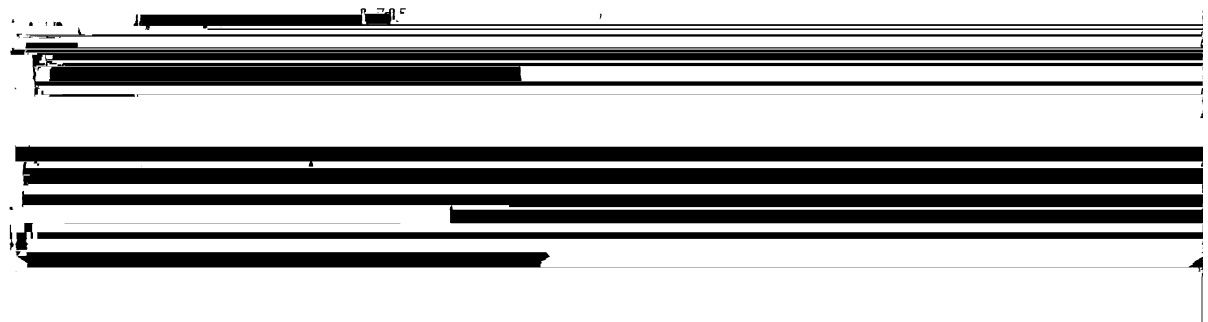
## AC Electrical Characteristics



**Physical Dimensions** inches (millimeters) unless otherwise noted



**20-Terminal Ceramic Leadless Chip Carrier (L)**  
**NS Package Number E20A**



**16-Lead Ceramic Dual-In-Line Package (D)**  
**NS Package Number J16A**

