Operational Amplifier As Window Detector & Zero Crossing Detector

Product Categories: Electronics, Engineering Equipment, Operational Amplifier's, Operational Amplifier's

Product Page: https://www.labappara.com/product/operational-amplifier-as-window-detector-zero-crossing-detector/

Product Description

Operational Amplifier As Window Detector & Zero Crossing Detector
Comparator is a circuit that produces two output state +V sat and -V sat by comparing theinput signal with a reference voltage. If the input signal is applied to the inverting terminal ofop-amp then for input voltages less than V ref , the output is equal to +V sat and for inputvoltages greater than v ref , the output voltage is equal to – V sat. If the reference voltage is zero,then the comparator can be used as zero crossing detector. If the applied input signal is asinusoid, then for positive half cycle, the output is – V sat and for negative half cycle, theoutput is +V sat thus producing a square wave. That is the zero- crossing detector can be usedto convert a sinusoidal wave form to a square wave.Fig.6.1. Zero Crossing detector