



T-51-19

ZN1036E/D

PROGRAMMABLE COUNTER TIMER INTEGRATED CIRCUIT

The ZN1036 combines linear and digital functions on the same chip such that simple precision timers can be constructed using the minimum of low cost external components. The frequency of an on-chip oscillator is determined by an external capacitor and resistor. Fine adjustment can then be achieved by the variation of an external trimming resistor. A buffered oscillator output can be used to monitor the trimming operation without affecting the oscillator frequency.

Pulses from the oscillator are fed into a programmable counter and the output changes state after a preset number of pulses. The counter is programmable in 4 stages - 4095, 2047, 1023 and 511 counts.

In this way precise time periods can be defined by timing capacitors and resistors of much smaller value than would be required by single RC time constant timers.

ABSOLUTE MAXIMUM RATINGS

Dissipation	250mW derate above 30°C at 5mW/°C
Output source current	25mA
Output sink current	25mA
Operating temperature range	0 to +70°C
Storage temperature range	-55 to +125°C

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Timing section						See Note 5
Timing resistor	R_T	2k7				

