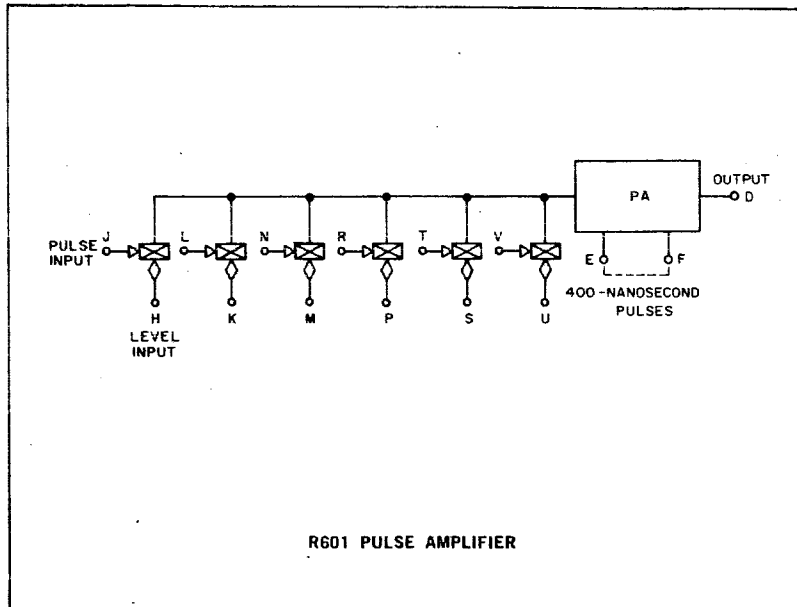


# PULSE AMPLIFIER TYPE R601

**R  
SERIES**



The R601 is a pulse amplifier that standardizes pulses in amplitude and width. Outputs may be either standard 100- or 400-nsec pulses ( $-3\text{v}$  to ground). It has six DCD gates so that inputs from as many as six sources may be mixed. Input pulses can occur at any frequency up to 2 mc for 100-nsec pulse outputs and up to 1 mc for 400-nsec outputs. Delay through the pulse amplifier is approximately 50 nsec.

**DCD GATE INPUTS: Level** — Standard levels of  $-3\text{v}$  and ground. A DCD gate is enabled by a ground level and disabled by a  $-3\text{v}$  level. The conditioning level must be present for at least 400 nsec before the gate is pulsed. The level input represents 2 ma of load at ground. **Pulse** — 40-nsec or longer pulses,  $-3\text{v}$  to ground, at any frequency up to 2 mc. It can also be driven by positive-going level changes ( $-3\text{v}$  to ground) with rise times of 60 nsec max, and dura-

tion of 40 nsec min. The input must have been at  $-3\text{v}$  for at least 400 nsec prior to operation of any input. The pulse input represents 3 ma of load at ground.

**OUTPUT:** With terminals E and F connected together, the output is a standard 400-nsec pulse ( $-3\text{v}$  to ground). With E and F open, the output is a standard 100-nsec pulse,  $-3\text{v}$  to ground. The output (for either 100- or 400-nsec pulses) can drive 70 ma of external load at ground. The internal load is 3 ma.

Pulse amplifier outputs may be paralleled for a logical OR.

Pulse lines and ground lines should be kept as short as possible.

**POWER:**  $+10\text{ v(A)}/1.1\text{ ma}$ ;  $-15\text{ v(B)}/33\text{ ma}$ .