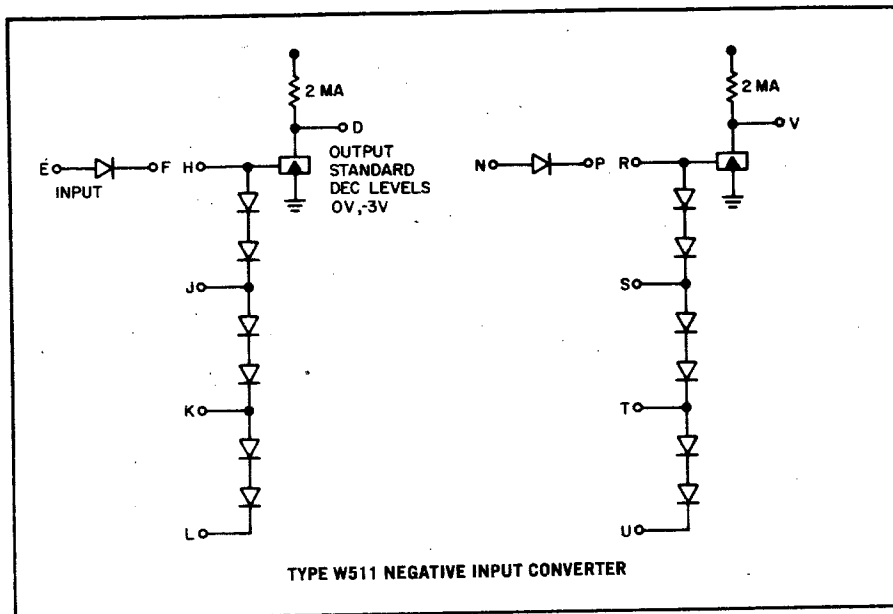


# NEGATIVE INPUT CONVERTER TYPE W511

**W  
SERIES**



The Type W511 Negative Level Converter contains two circuits that convert negative levels to DEC standard levels of ground and  $-3v$ . Each circuit consists of a grounded emitter inverter with a string of bias diodes between its base and the input pins. A separate input diode is also provided. By connecting the input diode to various points on the diode

string, the switching threshold can be set at  $0v$ ,  $-1v$ ,  $-2v$ , or  $-3v$  (see the table below). When the input is more positive than the switching threshold by  $1v$ , the inverter is cut off and the output is at  $-3v$ . When the input is more negative than the switching threshold by  $1v$ , the inverter is saturated and the output is at ground.

Threshold	Connections	Output = $-3v$	Output = $0v$
$0v$	F & H, P & R	Input $\geq +1.0v$	Input $\leq -1.0v$
$-1v$	F & J, P & S	Input $\geq 0.0v$	Input $\leq -2.0v$
$-2v$	F & K, P & T	Input $\geq -1.0v$	Input $\leq -3.0v$
$-3v$	F & L, P & U	Input $\geq -2.0v$	Input $\leq -4.0v$

In connecting input diodes to the bias string, use short, direct wire. Under no conditions should anything but the input diode be connected to a bias string pin. Inputs must be connected only to pins E and N.

**INPUTS:** Voltage levels must not exceed  $+25v$  or go below  $-50v$ . Input current required is approximately  $1\text{ ma}$  when the input is slightly more positive

than the threshold, rising to a maximum of  $4\text{ ma}$  when the input is at  $+25v$ . Input leakage is  $100\text{ }\mu\text{a}$  or less when the input is more negative than the threshold.

**OUTPUTS:** The output is an inverter with a  $2\text{ ma}$  clamped load. It can drive  $18\text{ ma}$  at ground.

**POWER:**  $+10v(A)/3\text{ ma}$ ;  $-15v(B)/24\text{ ma}$ .

W511 — \$17.00