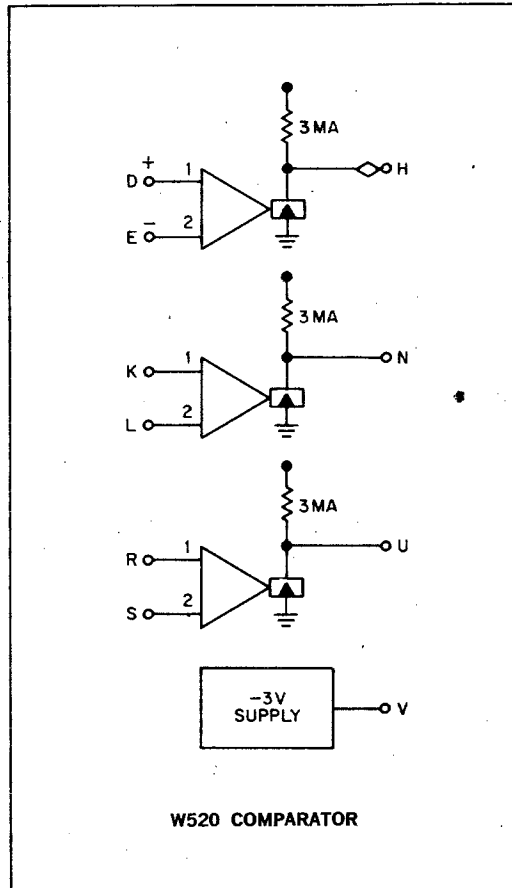


# COMPARATOR TYPE W520

# W SERIES



This module is useful as an inexpensive comparator for A/D work, or as a general-purpose input level converter. The W520 contains three four-transistor difference amplifiers which give DEC Standard levels at the output. The state of the output is determined by the relative polarity of the input voltages.

Max delay for output fall:	} for 200 mv square wave about a fixed reference voltage
75 ns, 50% to 50%	
Max delay for output rise:	
150 ns, 50% to 50%	
Typical rise time 10% to 90%:	
25 ns	

The W520 is tested for 100 mv differences minimum. It is not a replacement for the more precise A502.

**INPUTS:** High impedance inputs to the amplifier are

provided. The more positive input appears as 100 K ohms to  $-15v$ ; the more negative input supplies a maximum of  $0.5 \mu a$  from  $+10v$  at room temperature. For proper operation of the module, input 2 voltage must remain between  $+5v$  and  $-10v$ , and input 1 between  $+10v$  and  $-15v$ . Input excursions beyond  $+10v$  or  $-15v$  will cause damage.

**OUTPUTS:** Standard DEC levels of 0 and  $-3v$ ; capable of driving 17 ma at ground. The internal load is 3 ma. If input 1 is more positive than input 2, the output will be zero. The  $-3v$  output should be lightly loaded (less than 1 ma current) by any external path to ground unless an external resistor is added between pin V and  $-15$  volts. Up to 50 ma may be drawn by external path from pin V to  $-15v$ .

**POWER:**  $+10v(A)/37$  ma;  $-15v/32$  ma.

W520 — \$43.00