

TEST32 card parts list

Qty.	Symbol	Description
32	R1-R32	330Ω resistors [orange-orange-brown]
4	H1-H4	8-pin Waldom side entry connectors (Mouser 538-09-52-3081)
32	L1-L32	Bicolor diffused red/green T1 size 2-lead LEDs (Mouser 604-L937EGW) or if only using to test current sinking outputs can use diffused T1 size Red LEDs (Digi-Key P363) or if only using to test current sourcing outputs can use diffused T1 size Green LEDs (Digi-Key P364)
1	—	Clip lead (Jameco 10444)

Author's recommendations for suppliers given in parentheses above with part numbers where applicable. Equivalent parts may be substituted. Resistors are ¼W, 5 percent and color codes are given in brackets.

In general, I recommend using the 2-lead bicolor LEDs as this enables testing both current-sinking and current-sourcing outputs. Connect the clip lead to +5Vdc when checking standard current-sinking outputs and to ground when checking alternate current-sourcing outputs.

However, bicolor LEDs are considerably more expensive than single color LEDs. Therefore, if you plan only to use one type of output (standard current-sinking or alternate current-sourcing) you can install the less expensive single color LEDs. I like to use the red LED for testing standard current-sinking and the green LED for testing alternate current-sourcing outputs. This way it's easy to tell the cards intended function plus the colors match those that light when using the multi-purpose bicolor LEDs.