Electric and electronic symbols for VCE Physics and VCE Systems Engineering

For each component a **recommended symbol** is shown in its normally accepted orientation/s, i.e. vertically and/or horizontally. In electronics there is a longstanding convention to show most components with a vertical orientation and for the circuit to read from the source or input on the left to the output or remaining circuit on the right. Other **alternative symbols** that may be encountered are also shown. **Notes** include relevant acceptance of symbol.

Component group	Component	Recommended symbol	Alternative symbols	Notes
sources	cell		→	
	battery, DC power supply		→├-+├ ⁻ → + + → +	
	variable DC power supply	# #	111-	
	AC power supply			
resistors	resistor		-	Alternative symbol now regarded as outdated.

Component group	Component	Recommended symbol	Alternative symbols	Notes
	variable resistor, potentiometer, voltage divider			A variable resistor where the variation is achieved by use of a sliding contact.
	variable resistor		-\\\	A general symbol for a variable resistor where the means of variation is not specified.
	light-dependent resistor (LDR)			
	filament globe			
	thermistor			
	fuse		-0>-0	

Component group	Component	Recommended symbol	Alternative symbols	Notes
capacitors	(non-polarised) capacitor	+	\dashv \vdash	
	variable capacitor	# #	# #	
	polarised capacitor, electrolytic capacitor	+ -	<u>+</u> ⊢ - ⊢ + ⊢	
transformers	iron-cored transformer (one secondary winding)			
	iron-cored transformer (one secondary winding – centre-tapped)			
	iron-cored transformer (two secondary windings)			

Component group	Component	Recommended symbol	Alternative symbols	Notes
diodes	junction diode	→		Additional alternative symbols for all diodes include those where the single straight-line section of the symbol is shown as a heavier line.
	Zener diode	_ 		
	photo diode			
	light-emitting diode (LED)	→		