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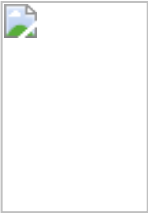
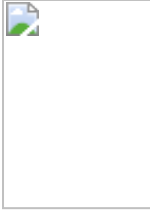
3 Year Validity (Multiple Devices)

Series and Parallel Circuits Differences in Physics Import Concepts Must to Know

Question. Difference Between Series and Parallel Circuits.

Answer:

Differentiating Property	Series Circuits	Parallel Circuits
Component Orientation	The components are connected in one after the other manner.	Here the components are connected in head-to-head and tail to tail manner.
Current	Same current flows through all the components in the circuit.	Different current flows through each component in the circuit.
Voltage	Different potential difference (voltage) exists across each component.	The potential difference (voltage) existing across the various component in the circuit is same.
Number of paths	Single	Multiple (depends on number of components) .
Fault	Fault in one of the circuit	Fault in a single component

	components causes hindrance in operation of complete circuit.	does not hinder the operation of rest of the circuit.
Troubleshooting	Difficult.	Quite easy.
Equivalent resistance	The equivalent resistance is always more than highest value of resistance in the series connection.	The equivalent resistance always has a less value than any of the single resistors connected parallely.
Wire	Comparatively more wire is needed to make it.	Comparatively less wire is needed to make it.
Functionality	Components are not functional if any of the components is damaged because it disrupts the flow of current.	Components are functional even if any of the other components is damaged.
Diagram		
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