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Study at a Glance on Op-Amp

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Abstract:

For the solve problems many aim such math., operation. We use op-amp. Here power deliver is such compare to electronic circuit method create dc from ac.pin seven and pin four are with positive and Negative supply. For many case we need dc part. Liner and digital circuits act as style of their activities, maintain signal supply and power supply. For many communication, video, computer, integration take help from op-amp operation.

The difference between signals are given maintained by amplifier and power is created needed dc position.18V is delivered and 12v and 15v are also deliver from the op-amp activates Differentiate, addition, subtraction, mathematical by operation control.

Introduction: I level my Project on paper known all virtues required where parts are gained. Every time I am in serious for step maintaining. First ready the components get all collected and organized all components before placing and connecting the parts. This way I knew accurately what I have where it is before.

I have to notice for hot soldering. Resister diodes wires and other parts will make it mush easy put capacitors, transistors etc on first will. Addition, subtraction, integration, differentiation , are Performed through op-amp integrated analysis of op-amp are also maintain through communication in op-amp amplifier

Component and Processes: In nature semiconductor device and maintain in one direction for the flow of current. Here Present component are such as transformer, diode, resistor and also capacitor for case of filter.

In transformer performance it is observed that high voltage is reach in low voltage e.g.250V to 12V. Grounded potential is maintained in middle of the bridge system and four diodes are in connection. Here ripple case is occurring by near about 1000µF and 35V.

Output is taken in value by digital millimetres. Two types of coil primary and secondary are active in transformer, it is management to make high in low and low in high voltage. Voltage ratio is equal turn's ratio. Here secondary power not above the primary power .we get value of safe current from secondary with use 230V Connection to transformer and 12V respectively primary and secondary coil.

In case of bridge system rectifier there are four diodes in bridge. Here arise two cycles for signals applied for positive cycles two diodes are in on when other two diodes is off condition. Same for negative half cycle the other two becomes on and first two are in off state, and such way we get full output for two cycle. Here filter differ ac for signal and power dc part to load resistance.

Applications: It has different many applications side in various cases. Many circuits may be joined by op-amp operating method. As follows:

1. We can see as power supply.
2. Execution in Wien bridge oscillator.
3. In the activities about R-C coupled transistor.
4. At about flip-flop feature.
5. Common emitter function.
6. Field of storage battery.
7. Differentiator.
8. As inverting system.
9. Change of digit as analog

Conclusion: In real it is seen that semiconductors are with properties heat sensitive. When we will apply the op-amp in any circuit system we must care on soldering, joints, and about in poor connection in correct component effect. It is clear that equipment and collection errors in calculation should minimize. In our present world op-amp effects different direction. When we will do something like ac mains then large figure resistance should put as load. Any type wrong step may be damage IC. Changing load, load current also different magnitude.

Reference:

1. Advanced practical physics: B.Ghosh
2. Principle of Electronics: V.K.Mehta And Rohit Mehta
3. Basice Electronics and Electricity: Ittiavirah and Premnath
4. Electronics Fundamentals and Application: D.Chattapadhya and P.C.Rakshit
5. “Rectifier”, Concise Encylopedia of Science and Tecnology, Third Eddision, Sybil P.Parker, Ed. Mcgraw-Hill, Inc