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| Sr no. | Capacitor Type | Applications |
| 1 | Ceramic Capacitors | Ceramic capacitors are majorly used in the resonant circuit in transmitter stations.  Class 2 high-power capacitors are used in high-voltage power supplies, power circuit breakers, induction furnaces, etc.  Surface mount capacitors are often used in [printed circuit boards](https://www.elprocus.com/different-types-printed-circuit-boards/)and high-density applications.  Ceramic capacitors can also be used as general-purpose capacitor, because of their non-polarity and are available in a large variety of capacitances, voltage ratings, and sizes.  Ceramic disc capacitors are used across brush [DC motors](https://www.elprocus.com/difference-dc-motor-servo-motor-stepper-motor/) to minimize RF noise.  MLCCs used in printed circuit boards (PCB) are rated for voltages from only a few volts up to several hundred volts, depending on the application. |
| 2 | Film Capacitors | Film capacitor is widely employed in circuits for high-frequency filtering, high-frequency bypass, and first or second-order filtering. Electronics, household appliances, telecommunications, electric power, electrified trains, hybrid cars, wind power, solar power, and many more sectors make extensive use of it.  Also be employed in more traditional applications such as voltage-smoothing capacitors, filters, and audio crossovers. It can be used to store energy and then release it in the form of a high-current pulse when required. |
| 3 | Power Film Capacitors | Power film capacitors are used in power electronics devices, phase shifters, X-ray flashes, and pulsed lasers, while the low-power variants are used as decoupling capacitors, filters, and A/D convertors. Other notable applications are safety capacitors, electromagnetic interference suppression, fluorescent light ballasts, and snubber capacitors. |
| 4 | Electrolytic Capacitors | Used to reduce voltage fluctuations in various filtering devices.  Used in output and input smoothing to filter when the DC signal is weak with the AC component.  They are extensively used for noise filtering or decoupling in power supplies.  They are used for coupling signals between amplifier stages and also to store energy in flashlamps. |
| 5 | Glass | Glass Capacitors are used where the ultimate performance is required for RF circuits. Glass dielectric capacitors offer very high levels of performance, although their cost is high when compared to many other forms of the capacitor.  Circuits exposed to temperature extremes  Applications requiring a high Q circuit  Low microphone requirements  High power amplifiers  High tolerance areas |
| 6 | Supercapacitors | Supercapacitors are used in applications requiring many rapid charge/discharge cycles, rather than long-term compact energy storage — in automobiles, buses, trains, cranes and elevators, where they are used for [regenerative braking](https://en.wikipedia.org/wiki/Regenerative_brake), short-term energy storage, or burst-mode power delivery.[[3]](https://en.wikipedia.org/wiki/Supercapacitor#cite_note-3) Smaller units are used as power backup for [static random-access memory](https://en.wikipedia.org/wiki/Static_random-access_memory) (SRAM). |
| 7 | Paper Capacitor | Paper capacitor has a wide range of electrical and electronic uses  Paper capacitor is used in power conditioning systems that block DC impulses while allowing AC signals  It is utilized in-car audio systems to supplement amplifier power as needed  It is used as sensor for detecting air humidity, fuel levels, and mechanical strain  Paper capacitor is used in electronic noise filtering, signal coupling and decoupling systems, and remote sensing systems  utilized in signal processing systems such as tuners, speakers, dynamic random-access memory (DRAM), radio receivers, and analog equalizers.  It is useful in screening applications. |
| 8 | Mica Capacitor | Resonance circuits.  Time constant circuits.  Coupling circuits.  High-power, high-current RF broadcast transmitters.  Défense electronics.  Power conversion circuits for low-capacitance snubber applications.  Cable TV amplifiers.  Radio/TV transmitters |