

Distinguish, differentiate, compare and explain what is the difference between Magnetron and Reflex Klystron. Comparison and Differences.

## Differences between Magnetron and Reflex Klystron

S.No.	Magnetron	Reflex Klystron
1	Magnetron are cross-field tubes as they have the electric field and magnetic field perpendicular to each other.	Reflex Klystron is a linear microwave beam tube.
2	They are referred as M-type tubes.	They are referred as O tubes or original tubes.
3	The energy containing electrons interact with RF field for a long duration.	The energy carrying electrons interacts the RF field for a short duration.
4	The efficiency of magnetron is in the range of 40 to 70%.	The efficiency provided by reflex klystron is in the range of 10 to 20%.
5	The frequency range for magnetron is 500 MHz to 12 GHz.	The frequency range of reflex klystron is 4 to 200 GHz.