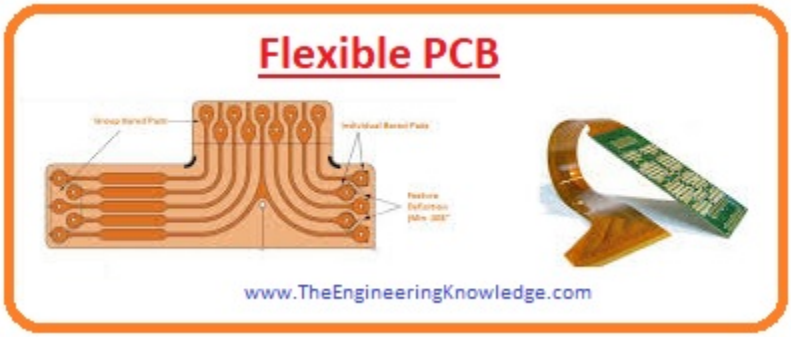
PCB Types according to usage

Rigid PCB

- This category of a circuit board is manufactured from such a substance that not change its physical state when some stress is applied to If ,this type can resist pressure and high temperature.

Flexible PCB

- This category of a circuit board is manufactured by such substances that can easily transform into other shapes according to circuitry requirement, mostly plastic used for this PCB.



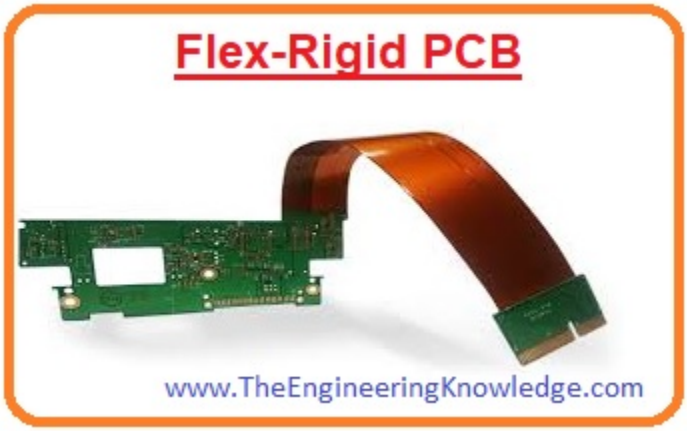
Flex-Rigid PCB

- Normally we have two types:

Flex to install: this is the most common of the two and applies when a board only folds once, either when the device or product is assembled or dismantled, but is otherwise sturdy and stable throughout

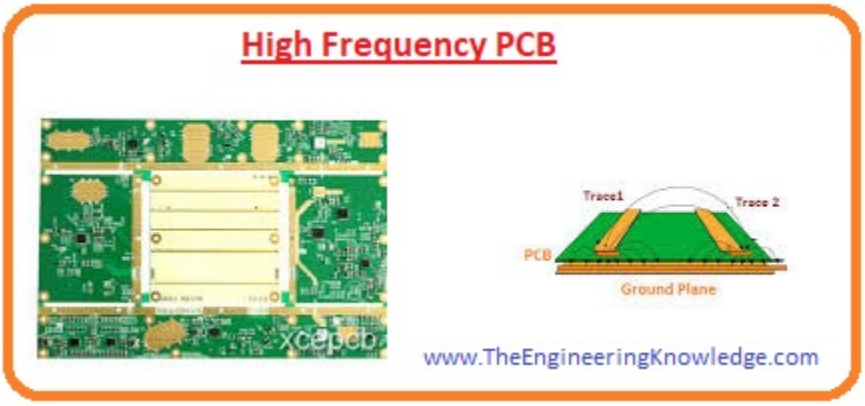
Dynamic flex: a dynamic flex board will be used when a product is required to fold and bend when in use, meaning they are highly durable and can last through a thousand flex cycles

- So here comes the Flex-Rigid PCB These PCBs are assembled when flexible and rigid PCBs are combined with each other. This board provides both features of flexible and rigid.



High Frequency PCB

- This type of PCB is different from other types in construction, it also has the ability to send a signal of frequency larger than one gigahertz.



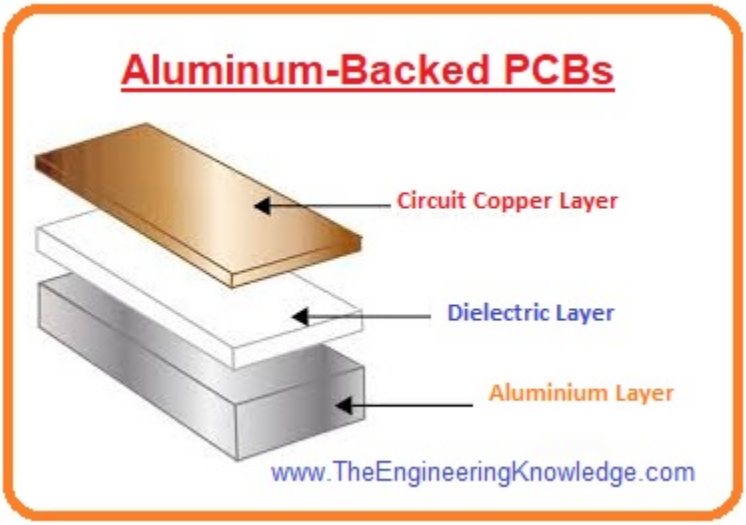
Aluminum-Backed PCBs

- This type of circuit board is manufactured in a similar fashion to copper PCB assembled.
- But the difference is that like other PCB it does not uses glass-fiber for its construction but uses aluminum or copper.
- This module is attached with an insulator that provide less heat transfer from its backing.

Double Sided Aluminum PCB (2 sided SMT and DIP Face,)
2 layer Circuits, Cu:35um/35um ,Board Thickness:1.6mm

Solder mask		15um Oil
Top layer		35um Copper
Prepreg	- - - - - - - - - - - - - - - -	120um 1 x 2116 FR4
Aluminum		1300um
Prepreg	- - - - - - - - - - - - - - - -	120um 1 x 2116 FR4
Bottom layer		35um Copper
Solder mask		15um Oil

Thickness Total:	1.60mm
Tolerance:	+/- 10%
Max.	1.76mm
Min.	1.44mm



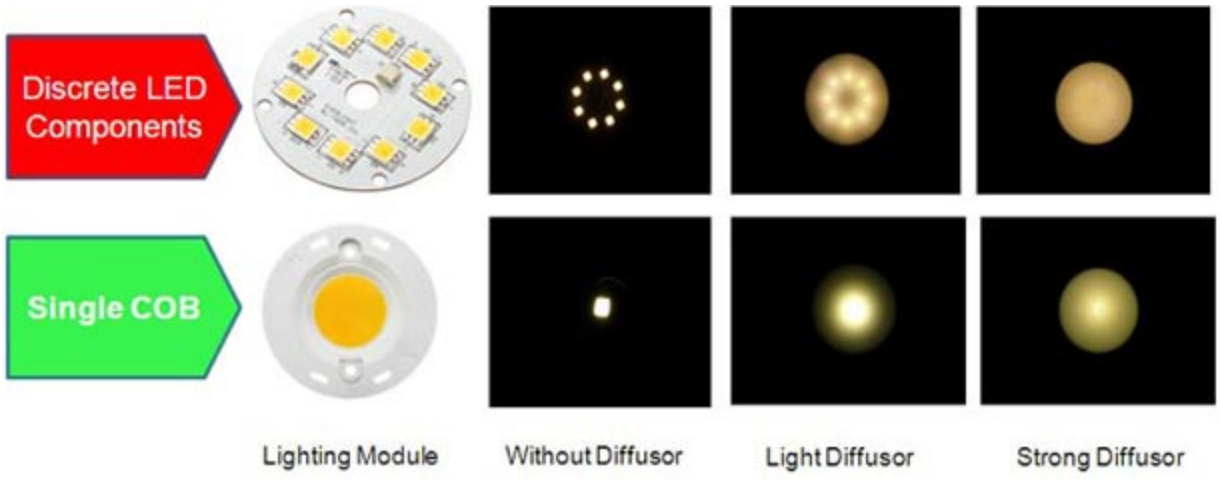
If you plan on creating a flex circuit, an aluminum flex PCB can only flex into its initial position. It will bend to fit into smaller electronics, but it won't withstand the stress of vibration.

LED PCB:

We have 2 types:

SMD LED: Surface Mount Technology

COB LED: Chip On Board


Discrete LED Components
Single COB
Lighting Module
Without Diffusor
Light Diffusor
Strong Diffusor