

Metal Base Circuit Board

Abstract

Lifespan of LEDs can be lengthened, and the workability of the printed circuit board during circuit formation and during LED mounting can be improved.

A metal base circuit board, having an insulating layer with a linear expansion coefficient of 60 ppm per degree C or higher and 120 ppm per degree C or lower, a metal foil provided on one side of the insulating layer, comprising a metal material with a linear expansion coefficient of 10 ppm per degree C or higher and 35 ppm per degree C or lower, a circuit portion and a non-circuit portion having a linear expansion coefficient of 10 ppm per degree C or higher and 35 ppm per degree C or lower, and a white film formed on top of the insulating layer, circuit portion, and non-circuit portion, the total sum of the areas of the non-circuit portion and the circuit portion on top of the insulating layer being 50% or higher and 95% or lower relative to the area of the metal foil, and the relation between the linear expansion coefficients of each of the materials being: linear expansion coefficient of insulating layer > linear expansion coefficient of metal foil > linear expansion coefficient of circuit portion and non-circuit portion.