28.8Ω. There is not the phenomenon of ageing. The working life of this formula sample has certain stability. Formula E of the sample is energized from 0 to 300h, the resistance of the sample changed from 18.6Ω to 19.8Ω. There is the phenomenon of ageing. This is due to the proportion of conductive filler is too high to conductive filler badly disperse in system and easily precipitate. Resistance of the place where distribute lots of conductive filler is small and resistance of the place where distribute less conductive filler is large, that causing transformation of total resistance.

IV. CONCLUSION

After the text edit has been completed, the paper is ready for the template.

a) Surface heating temperature of the rectangular sample is related to the formula of the conductive ink and length-width ratio of the sample. The larger proportion of conductive filler in system, the higher surface heating temperature of the sample. And the larger length-width ratio of the sample, the higher surface heating temperature of the sample.

b) Designed the optimal formula of conductive ink suitable for heating, and the formula is m(resin)：m(graphite)：m(carbon black)=4:3:1. In this formulation, when the length-width ratio of sample is 50:1, the surface heating temperature is maintained 43℃ at the AC220, and the power density can achieve 232W/ m2. When the length-width ratio of sample is 20:1, the surface heating temperature is maintained 55℃ at the AC220, and the power density can achieve 356W/ m^2.

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