

Tape Casting for Ceramic Substrate

Central Res. Lab. Hitachi, Ltd.
Gyouzou Toda

The ceramic green sheet for the multilayer ceramic substrate (Al_2O_3 , etc.) or IC package has been fabricated by the tape casting using a doctor blade method. This paper describes the fabrication process of the ceramic green sheet and its properties.

1. Introduction

back ground of the ceramic substrates

2. Required properties of the green sheet for the ceramic substrate

punching, printing, laminating, sintering

3. Important parameters to fabricate the ceramic green sheet

organic binders, ball milling, slurry, thickness controlling,
imperfections

4. Properties of ceramic green sheet

mechanical properties, surfaces, thermal properties, permeability,
microstructures