mass%, and

wherein the base layer, the front layer and the back layer are stretched, and

wherein a surface roughness Ra of the front layer and of the back layer is 0.2 μm or more.

Technical Problem

[0006]

An object of the present invention is to provide a film for a capacitor such that the film excels in high-temperature dielectric breakdown voltage (high-temperature BDV) and has blocking resistance, and bleeding-out of, for instance, a nucleating agent is suppressed even after long-term storage.

Solution to Problem

[0007]

The present invention pertains to a multilayer polypropylene film for a capacitor, the film including a base

CLAIMS

1. A multilayer polypropylene film for a capacitor comprising a base layer composed of a propylene polymer composition containing a propylene homopolymer (X) and 0.0001 to 0.05 mass% of a polymer-based α-crystal nucleating agent (C), and a front layer on one side of the base layer and a back layer on the other side of the base layer,

wherein the front layer and the back layer are composed of a propylene-based polymer (Y) that is a polymer-based α-crystal nucleating agent (C)-free polymer or is a propylene homopolymer having a content of the polymer-based α-crystal nucleating agent (C) being less than 0.00001 mass%, and

wherein the base layer, the front layer and the back layer are stretched, and

wherein a surface roughness Ra of the front layer and of the back layer is 0.2 μm or more.

2. The multilayer polypropylene film for a capacitor according to claim 1, wherein the polymer-based α-crystal nucleating agent (C) is a polymer having a glass transition temperature and/or a melting point (Tm) of 280°C or higher.

3. The multilayer polypropylene film for a capacitor according to claim 1 or 2, wherein the propylene homopolymer (X) satisfies the following requirements (1) to (5):

(1) having a melt flow rate (MFR) (ASTM D1238, at 230°C, under a load of 2.16 kg) of in the range of 1 to 10 g/10 min,

(2) having a mmmm determined by ^{13}C-NMR of in the range of 0.930 to 0.999,

(3) having an ash content of 50 ppm by mass or less,

(4) having a chlorine content of 5 ppm by mass or less, and

(5) having a ratio (Mw/Mn) of weight average molecular weight (Mw) to number average molecular weight (Mn) as measured by gel permeation chromatography (GPC) being in the range of 4.5 to 12.0.