

# **SHENZHEN JIADIANBAO ELECTRICAL PRODUCTS CO., LTD.**

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## **Description of circuitry used**

### **For G986F with EB-36**

This fluorescent lamp G986F was equipped with an electronic ballast EB-36.

120V/60Hz power supply firstly pass an over-load protection fuse (5A/125V). Then, enter a ballast filter composed by 2 capacitors (104/275Vac) and 2 chokes (30mHx 2 and 50mH) for preventing interference noise feed back to the supply net.

Then, enter a rectifier consisting of 2 parts. One is a rectifier doubler composed by 2 diodes (1N4007) and 2 capacitors (22  $\mu$ F/200V) for raising the rectified voltage from 120V AC to 260V DC. One is a rectifier filter, which is a capacitor (104/400V) used for smoothing the wave shape.

Now, full-wavely rectified 260V DC pass a transistor protection circuitry composed by 2 diodes (1N4007) for preventing the reverse peak voltage exceeding the rated value of said 2 transistors. Then, 260V DC enter the frequency converter composed mainly by a trigger (DB3) and a pulse-transformer (TK=2T:10T:2T) and 2 transistors (PHE13007). The frequency converter is a trigger oscillator used to converting said 260V DC to 260V AC with a frequency of 39 KHz for lighting the fluorescent tube (36W). There in series of the start capacitor is a poly-switch (TF) used for protecting the fluorescent tube no start from big current during starting .

Radio frequency produced on fluorescent tube is prevented to feed back by a choke (1.2mH) and a capacitor (104/400V)