

To: \_\_\_\_\_

From: Ceramics Division  
 Matsushita Electronic Components Co., Ltd.  
 Miyazaki Matsushita Electric Co., Ltd.

## Re:Change of Laser Marking Color on High-voltage Ceramic Capacitors

We have provided clear marking using the coloring method of laser irradiation for our Ceramic Disc Capacitors (high voltage and safety regulations), excluding stamp-marked, partly-produced capacitors.

Our capacitors' insulation-coating maker has added a lead-based compound for a small amount to improve the coloring performance. In order to meet the requirements of the regulation concerning lead, the maker has informed us of their decision that they would stop using the material.

Matsushita Electric has the same policy of producing lead-free products for global environment protection, and accordingly, we had to accept their decision. We have examined other methods for improving the coloring performance, but any alternative is not able to make such clear marking contrast as that of the currently-used material.

At the end of this letter, an example of marking with the new material is given. We thank you for your generous understanding and approval of the marking-color change for the capacitors.

### Applicable capacitors:

#### Ceramic Disc Capacitors

Capacitors approved for high voltage (500 VDC and higher) and safety regulations (Products of Japan and Malaysia)

Stamp-marked and wax-impregnated capacitors are excluded.

### Marking method:

Current..... Laser irradiation using a lead-based color former that is added to the paint  
 (marking color : blackish brown)

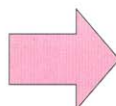
New ..... Laser irradiation using an iron oxide-based pigment that is added to the paint  
 (marking color : reddish brown)

The alteration of coloring method will not cause any change in characteristics, performance or safety-standard conformance of the capacitors.

### Implementation:

We will start using the new method in March 2000, and the changeover will be completed within four months from the start. Capacitors that use the new coloring method will be delivered when those that use the current method have run out of stock.

Example of the current marking:



Example of the new marking:

