Attn.: valued customer

Page 1/2 Date: Nov. 20th , 2012 Ref. No. : IMC-122-021c



Manufacturing Co., Ltd

Hikawa-cho, Izumo-city, Shimane Pref., Japan 699-0696

Phone : +81-853-72-4551 Fax. : +81-853-72-3891

Re: Request for discontinuance of Precious metal electrode type MLCC(medium volt)

(Medium voltage Monolithic Ceramic Capacitor)

Dear Sir and/or Madam,

Thank you for your usual patronage on our ceramic capacitor.

We would like to notify you of the discontinuance of Murata MLCC / Precious metal electrode type as shown below. Please kindly review this document for the details of the request.

1. <u>Object items</u>: Medium Voltage MLCC(Chip Monolithic Ceramic Capacitor (Precious metal electrode type) DC200V & DC500V of High Dielectric type and Low loss type

➢ Object series➢ Rated voltage: GRM/GRG series: DC200V, DC500V

➤ Temp. Characteristic and Cap. : X7R/X7F/W5R/W5F-char. 、△C-char. (C0G) 10pF and over

> Murata part number : <u>GR* *** ** 2D *** * Y***</u>, <u>GR* *** ** 2H *** * Y***</u> : <u>GR* *** ** 2D *** * V***</u>, <u>GR* *** ** 2H *** * V***</u>

2. <u>Discontinue Schedule</u>

Dead line of one shot last order : Sep. 30 2013
Date of last shipment : Mar. 31 2014

Please return this form with your signature by Mar. 31 2013

3. Reason

To improve the productivity for stable supply and to avoid the risk from the influence of precious metal market on supply and cost.

Murata has been expanding the products that are used base metal for Inner electrode material BME product as standard products. We would like to unify PME(precious metal) product and BME product to improve the productivity for stable supply.

4. Proposal of Substitute product

We would like to propose the substitute products. Please find attached list. Please confirm the deviation point described in the list.

As for structure and material, please refer to the following table.

^{*}Please feel free to contact us, if you have any question, or request on our proposal.

Structure & Material

Fig.1 (Nickel plated termination)

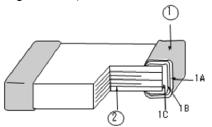
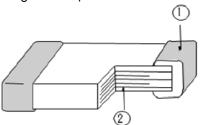


Fig.2(Silver palladium term.)



GRM/GRG series

			Material		
No.		NAME	Current [Precious metal] (Fig.1) GRM	Current [Precious metal] (Fig.2) GRG	Substitute[Base metal] (Fig.1) GRM
	1	Termination	-	Silver/Palladium or Silver	-
	1A	Plated layer	Tin	-	Tin
	1B	Plated layer	Nickel	-	Nickel
	1C	Electrode	Silver/Palladium or Silver	-	Copper
	2	Inner electrode	Palladium or Silver/Palladium	Palladium or Silver Palladium	Nickel

Please refer to attached Typical reliability Test data.

[Appendix]

- * Objective part number list
- * Comparison of Reliability data

Sincerely yours,

K. Kubota

Issued by Engineering Section Capacitor Div.2 Izumo Murata Mfg. Co., Ltd. Approved by (company name/name/dept., signature):