

Document Receipt Acknowledgement

Date:
Section:
Name:



Document Number: HEMCG2-2467

Date: Dec. 12, 2019

Notification – Addition of MLCC Factory (Philippines Manufacturing Co.of Murata,Inc.)

Dear. Valued Customer

Murata would like to notify you of the addition of new MLCC factory ;
Philippines Manufacturing Co.of Murata,Inc., to support delivery of MLCC.

1. Applicable Product:

High Dielectric Constant Type Monolithic Ceramic Capacitor

Size:	(EIA)	(EIA-J Size)	Dimension(LXW)	Murata Type
	0201	(0603)	0.6mmX0.3mm	GRM03 Series
	0402	(1005)	1.0mmX0.5mm	GRM15 Series,GCM15 Series
	0603	(1608)	1.6mmX0.8mm	GRM18 Series,GCM18 Series
	0805	(2012)	2.0mmX1.25mm	GRM21 Series,GCM21 Series

Temperature Characteristics : Code (Public standard Code)

GRM: B(B1·B3),R(R1),X5R(R6),X5S(C6),X6S(C8),X6T(D8),X7R(R7),X7S(C7),X7T(D7),X7U(E7),X8R(R9),X8L(L8)

GCM: B(B1),R(R1),X5R(R6),X6S(C8),X7R(R7),X7S(C7),X8R(R9),X8L(L8)

Rated Voltage: DC 100V and less

2. Changed Item:

Addition of MLCC Factory (Philippines Manufacturing Co.of Murata,Inc.)

3. Background

In response to the MLCC demand increase in overseas market, we are in the process of factory re-organization and relocation of production items based on following aspects.

- Increase the production ratio at overseas factory in the mid-long term point of view
- Risk management measures in preparation for natural disasters
- Supply capacity expansion by multi production sites
- Production items relocation to make the best use of advantage of each factory

Murata Philippines was established in Oct. 2012, and will be the second largest overseas factory next to Wuxi Murata Electronics Co., Ltd.

Most of GRM and GCM series demands comes from overseas customers, and is further expected to increase. We are going to respond to this challenge by expanding production capacity at Murata Philippines.

The products are produced with exactly the same machine, raw material and process control in Japan and overseas factory, so quality and electrical characteristics of Murata Philippines products are identical to those of all Murata factory.

4. Request

Please return this form with your signature by : Jun. 12, 2020

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

If there are no reply and inquiry from you by this date, we will proceed this change.

5 .Others

As for new factory's products, they will be labeled as "MADE IN PHILIPPINE".

Truly Yours. Thank you.

Fukui Murata MFG. Co., Ltd.



Confirmation Letter

Murata MFG. Co., Ltd.

Notification – Addition of MLCC Factory (Philippines Manufacturing Co.of Murata,Inc.)

4M Change detailed below is Subject to Further Discussion. Accepted.

High Dielectric Constant Type Monolithic Ceramic Capacitor

Size:	(EIA)	(EIA-J Size)	Dimension(LXW)	Murata Type
	0201	(0603)	0.6mmX0.3mm	GRM03 Series
	0402	(1005)	1.0mmX0.5mm	GRM15 Series,GCM15 Series
	0603	(1608)	1.6mmX0.8mm	GRM18 Series,GCM18 Series
	0805	(2012)	2.0mmX1.25mm	GRM21 Series,GCM21 Series

Temperature Characteristics : Code (Public standard Code)

GRM

B(B1 · B3),R(R1),X5R(R6),X5S(C6),X6S(C8),X6T(D8),X7R(R7),X7S(C7),X7T(D7),X7U(E7),X8R(R9),X8L(L8)

GCM

B(B1),R(R1),X5R(R6),X6S(C8),X7R(R7),X7S(C7),X8R(R9),X8L(L8)

Rated Voltage: DC 100V and less

Comments, Questions, etc.

Signature

Date: (MM, DD, YYYY)

Title:

Name:



For Document Number:
HEMCG2-2467

Part Number List

Please find the list below for the target part numbers which are registered as yours in Murata. (Customer Part Number)
Regardless of the list below, all part numbers shall be the target as far as they are categorized into the Product Type indicated in the Document.
Alternative Part Number: Size, Electrical Characteristics could be identical to or different from the current product.

Customer Part Number	Murata Part Number	Alternative Part Number	Sales Quantity (Unit: pieces)					Memo	
			2014FY	2015FY	2016FY	2017FY	2018FY		2019FY till Oct.
	GRM216R71H103KA01D	-	0	0	0	0	0	0	
	GRM188R71H102KA01D	-	0	0	0	0	0	0	
	GCM155L81C473KA37D	-	0	0	10,000	0	0	0	
	GCM155R71A104KA55D	-	0	0	0	20,000	10,000	20,000	
	GCM155R71C104JA55D	-	0	0	0	20,000	10,000	20,000	
	GCM155R71C104KA55D	-	24,320,000	56,090,000	61,160,000	53,860,000	28,330,000	38,470,000	
	GCM155R71C104KA55J	-	0	0	33,050,000	41,400,000	28,000,000	50,000	
	GCM155R71C333KA37D	-	0	270,000	460,000	340,000	180,000	0	
	GCM155R71C473KA37D	-	0	0	10,000	10,000	20,000	0	
	GCM155R71C563JA55D	-	0	0	0	10,000	0	0	
	GCM155R71C683KA55D	-	0	0	30,000	790,000	120,000	580,000	
	GCM155R71C823JA55D	-	0	0	0	10,000	10,000	0	
	GCM155R71C823KA55D	-	0	0	0	20,000	0	10,000	
	GCM155R71E103KA37D	-	0	0	20,000	60,000	10,000	10,000	
	GCM155R71E103KA37J	-	0	0	0	50,000	50,000	0	
	GCM155R71E104KE02D	-	0	0	10,000	10,000	10,000	10,000	
	GCM155R71E153KA55D	-	10,000	0	10,000	10,000	50,000	40,000	
	GCM155R71E223KA55D	-	0	500,000	350,000	430,000	3,330,000	10,000	
	GCM155R71E223KA55J	-	0	0	0	50,000	0	50,000	
	GCM155R71E273KA55D	-	0	0	0	0	0	0	
	GCM155R71E333KA55D	-	0	0	0	10,000	20,000	0	
	GCM155R71E393JA55D	-	0	0	0	10,000	30,000	0	
	GCM155R71E473KA55D	-	30,000	1,990,000	1,990,000	2,680,000	1,640,000	1,220,000	
	GCM155R71E473KA55J	-	0	0	0	0	0	0	
	GCM155R71E562JA37D	-	0	0	0	10,000	50,000	50,000	
	GCM155R71E682KA37D	-	0	0	10,000	0	10,000	20,000	
	GCM155R71H102JA37D	-	0	0	0	20,000	10,000	0	
	GCM155R71H102KA37D	-	710,000	990,000	12,880,000	32,140,000	26,240,000	19,300,000	
	GCM155R71H102KA37J	-	0	0	50,000	100,000	50,000	0	
	GCM155R71H103JA55D	-	0	0	0	20,000	10,000	10,000	
	GCM155R71H103KA55D	-	2,560,000	6,380,000	18,000,000	26,700,000	27,150,000	5,830,000	
	GCM155R71H103KA55J	-	0	2,450,000	10,650,000	9,500,000	15,400,000	10,250,000	
	GCM155R71H104KE02D	-	0	0	20,000	110,000	120,000	180,000	
	GCM155R71H104KE02J	-	0	0	0	50,000	50,000	100,000	
	GCM155R71H104ME02D	-	0	0	0	10,000	10,000	10,000	
	GCM155R71H122JA37D	-	0	0	0	10,000	0	10,000	
	GCM155R71H122KA37D	-	0	0	0	10,000	0	10,000	
	GCM155R71H123JA55D	-	0	0	0	20,000	0	10,000	
	GCM155R71H152JA37D	-	0	0	0	10,000	10,000	0	
	GCM155R71H152KA37D	-	0	0	10,000	0	10,000	10,000	
	GCM155R71H153JA55D	-	0	0	0	20,000	10,000	0	
	GCM155R71H153KA55D	-	0	0	10,000	0	20,000	0	
	GCM155R71H182KA37D	-	0	0	10,000	80,000	10,000	0	
	GCM155R71H183JA55D	-	0	0	0	0	10,000	0	
	GCM155R71H221KA37D	-	0	0	10,000	0	10,000	10,000	
	GCM155R71H222JA37D	-	0	0	0	0	10,000	20,000	
	GCM155R71H222KA37D	-	0	0	10,000	20,000	10,000	20,000	
	GCM155R71H223JA55D	-	0	0	0	10,000	10,000	0	
	GCM155R71H223KA55D	-	290,000	160,000	70,000	3,140,000	5,430,000	8,230,000	
	GCM155R71H272KA37D	-	0	0	10,000	0	70,000	0	
	GCM155R71H331KA37D	-	0	0	10,000	0	50,000	0	
	GCM155R71H332JA37D	-	0	0	0	20,000	20,000	0	

GCM155R71H332KA37D	-	0	0	80,000	120,000	130,000	110,000	
GCM155R71H332KA37J	-	0	0	0	50,000	50,000	0	
GCM155R71H333KE02D	-	0	0	10,000	40,000	40,000	20,000	
GCM155R71H391KA01J	-	950,000	0	0	0	0	0	
GCM155R71H471KA37D	-	0	0	0	10,000	20,000	0	
GCM155R71H471KA37J	-	0	0	0	50,000	50,000	0	
GCM155R71H472JA37D	-	0	0	10,000	0	0	10,000	
GCM155R71H472KA37D	-	0	0	10,000	20,000	10,000	0	
GCM155R71H472KA37J	-	0	0	0	100,000	50,000	0	
GCM155R71H473KE02D	-	0	0	10,000	20,000	1,710,000	510,000	
GCM155R71H473KE02J	-	0	0	0	50,000	0	50,000	
GCM155R71H561KA37D	-	0	100,000	0	0	0	0	
GCM155R71H562KA55D	-	0	0	0	0	10,000	10,000	
GCM155R71H681KA37D	-	0	370,000	1,240,000	840,000	930,000	230,000	
GCM155R71H682JA55D	-	0	2,580,000	2,870,000	0	0	0	
GCM155R71H682KA55D	-	0	0	10,000	0	20,000	60,000	
GCM155R71H683KE02D	-	0	0	10,000	10,000	10,000	0	
GCM155R71H683KE02J	-	0	0	0	0	50,000	0	
GCM155R71H821KA37D	-	0	0	0	70,000	120,000	40,000	
GCM155R71H822JA55D	-	0	0	0	10,000	10,000	0	
GCM155R72A102JA37D	-	10,000	0	0	0	0	0	
GCM155R72A102KA37D	-	0	0	0	10,000	10,000	0	
GCM155R72A221KA37D	-	0	0	10,000	0	10,000	0	
GCM155R72A222KA37D	-	0	0	0	10,000	10,000	0	
GCM155R72A222KA37J	-	0	0	0	0	0	50,000	
GCM155R72A332KA37D	-	30,000	0	60,000	30,000	30,000	30,000	
GCM155R72A471KA37D	-	0	40,000	10,000	30,000	0	20,000	
GCM155R72A471KA37J	-	0	0	0	0	0	0	
GCM155R72A472KA37D	-	0	0	10,000	10,000	10,000	10,000	
GCM188L81C224KA37D	-	0	0	0	4,000	0	0	
GCM188L81H104KA57D	-	0	0	4,000	8,000	96,000	12,000	
GCM188L81H471KA03D	-	0	0	0	12,000	0	4,000	
GCM188L81H473KA55D	-	0	0	8,000	4,000	0	0	
GCM188L81H683KA57D	-	0	0	0	0	0	0	
GCM188R11C474KA40D	-	0	0	0	0	0	0	
GCM188R11E224KA40D	-	0	0	0	0	0	0	
GCM188R11H104KA42D	-	0	0	0	0	0	0	
GCM188R71C104KA37D	-	0	0	4,000	12,000	20,000	4,000	
GCM188R71C104KA37J	-	0	0	0	10,000	50,000	0	
GCM188R71C274KA37D	-	0	0	0	8,000	0	4,000	
GCM188R71C334KA37D	-	0	0	12,000	8,000	16,000	4,000	
GCM188R71C394JA55D	-	0	0	0	0	36,000	20,000	
GCM188R71C474KA55D	-	28,000	32,000	24,000	2,188,000	1,000,000	164,000	
GCM188R71C474KA55J	-	0	0	10,000	0	10,000	0	
GCM188R71C683KA37D	-	0	0	4,000	4,000	0	0	
GCM188R71E102KA37D	-	0	0	12,000	0	8,000	0	
GCM188R71E104JA57D	-	0	0	0	8,000	8,000	0	
GCM188R71E104KA57D	-	0	0	60,000	40,000	208,000	288,000	
GCM188R71E154KA37D	-	0	0	12,000	4,000	32,000	60,000	
GCM188R71E184KA55D	-	0	0	0	4,000	20,000	4,000	
GCM188R71E223KA37D	-	0	0	4,000	8,000	4,000	0	
GCM188R71E224JA55D	-	0	0	0	4,000	4,000	0	
GCM188R71E224KA55D	-	1,068,000	11,808,000	1,124,000	9,236,000	3,928,000	232,000	
GCM188R71E224KA55J	-	0	0	0	60,000	950,000	200,000	
GCM188R71E332KA37D	-	0	0	0	4,000	0	0	
GCM188R71E333KA37D	-	0	0	4,000	24,000	0	0	
GCM188R71E472KA37D	-	40,000	0	0	0	0	0	
GCM188R71E473KA37D	-	5,176,000	8,852,000	10,536,000	13,136,000	104,000	6,424,000	
GCM188R71E473KA37J	-	0	0	0	310,000	450,000	70,000	
GCM188R71E682KA37D	-	0	40,000	0	0	0	0	
GCM188R71H102JA37D	-	0	0	4,000	8,000	4,000	0	
GCM188R71H102KA37D	-	0	0	0	8,000	8,000	4,000	
GCM188R71H102KA37J	-	0	150,000	1,860,000	3,150,000	4,290,000	600,000	

GCM188R71H103JA15D	-	0	0	916,000	468,000	0	252,000	
GCM188R71H103JA37D	-	0	0	4,000	4,000	8,000	4,000	
GCM188R71H103KA17F	-	180,000	70,000	0	0	0	0	
GCM188R71H103KA37D	-	0	0	4,000	16,000	12,000	4,000	
GCM188R71H103KA37J	-	0	0	0	0	20,000	10,000	
GCM188R71H104JA57D	-	0	0	0	8,000	4,000	0	
GCM188R71H104KA57D	-	16,712,000	2,428,000	3,808,000	6,884,000	10,108,000	8,812,000	
GCM188R71H104KA57J	-	3,730,000	5,350,000	4,690,000	3,710,000	1,520,000	680,000	
GCM188R71H123KA37D	-	0	0	0	4,000	4,000	0	
GCM188R71H152KA37D	-	0	0	8,000	12,000	292,000	404,000	
GCM188R71H153KA37D	-	208,000	0	4,000	12,000	32,000	0	
GCM188R71H183KA37D	-	0	0	4,000	4,000	4,000	0	
GCM188R71H222KA37D	-	0	0	0	4,000	8,000	0	
GCM188R71H222KA37J	-	0	0	10,000	0	0	0	
GCM188R71H223JA37D	-	0	32,000	4,000	4,000	4,000	0	
GCM188R71H223KA01D	-	0	0	76,000	0	0	0	
GCM188R71H223KA15D	-	0	0	444,000	0	0	0	
GCM188R71H223KA37D	-	3,580,000	5,600,000	8,448,000	3,180,000	508,000	52,000	
GCM188R71H223KA37J	-	0	0	0	0	0	0	
GCM188R71H273KA55D	-	0	0	0	4,000	0	0	
GCM188R71H332KA37D	-	0	0	4,000	12,000	4,000	12,000	
GCM188R71H332KA37J	-	0	0	10,000	10,000	0	0	
GCM188R71H333JA55D	-	0	0	0	4,000	0	0	
GCM188R71H333KA55D	-	656,000	2,456,000	772,000	1,804,000	2,160,000	672,000	
GCM188R71H392KA37D	-	0	52,000	0	0	48,000	0	
GCM188R71H393KA55D	-	0	0	4,000	0	4,000	0	
GCM188R71H472JA37D	-	0	0	0	4,000	4,000	0	
GCM188R71H472KA37D	-	52,000	3,712,000	7,672,000	13,616,000	4,568,000	1,688,000	
GCM188R71H472KA37J	-	0	0	10,000	10,000	20,000	0	
GCM188R71H473JA55D	-	0	0	4,000	4,000	4,000	4,000	
GCM188R71H473KA55D	-	2,624,000	152,000	84,000	980,000	3,196,000	1,248,000	
GCM188R71H473KA55J	-	0	0	10,000	10,000	20,000	0	
GCM188R71H562KA37D	-	0	0	4,000	0	0	4,000	
GCM188R71H563KA57D	-	0	0	4,000	0	0	0	
GCM188R71H682JA37D	-	0	0	0	4,000	0	0	
GCM188R71H682KA37D	-	0	0	8,000	12,000	104,000	0	
GCM188R71H683KA57D	-	0	0	8,000	4,000	8,000	0	
GCM188R71H822JA37D	-	0	0	4,000	8,000	4,000	0	
GCM188R71H823KA57D	-	0	0	4,000	0	4,000	0	
GCM188R72A102KA37D	-	240,000	2,012,000	2,140,000	3,344,000	4,600,000	0	
GCM188R72A102KA37J	-	0	0	0	210,000	700,000	0	
GCM188R72A103KA37D	-	740,000	1,504,000	3,680,000	6,388,000	6,384,000	4,000	
GCM188R72A103KA37J	-	0	0	0	0	20,000	0	
GCM188R72A152KA37D	-	0	0	0	20,000	4,000	4,000	
GCM188R72A152KA37J	-	0	0	30,000	0	0	0	
GCM188R72A153KA37D	-	0	0	4,000	0	4,000	0	
GCM188R72A222KA37D	-	0	0	8,000	32,000	8,000	0	
GCM188R72A223KA37D	-	860,000	1,956,000	3,964,000	2,532,000	1,528,000	384,000	
GCM188R72A223KA37J	-	0	0	10,000	10,000	20,000	0	
GCM188R72A332KA37D	-	0	0	4,000	12,000	12,000	0	
GCM188R72A471KA01D	-	0	0	0	0	0	0	
GCM188R72A472KA37D	-	0	20,000	8,000	16,000	12,000	0	
GCM188R72A682KA37D	-	0	0	4,000	4,000	4,000	0	
GCM216R71H102KA37D	-	100,000	152,000	136,000	164,000	176,000	56,000	
GCM216R71H103JA37D	-	0	0	0	4,000	4,000	0	
GCM216R71H103KA37D	-	308,000	344,000	3,092,000	1,640,000	1,824,000	236,000	
GCM216R71H222KA37D	-	0	0	4,000	4,000	24,000	20,000	
GCM216R71H223KA37D	-	0	0	12,000	0	72,000	0	
GCM216R71H272KA37D	-	0	0	32,000	0	0	0	
GCM216R71H332KA37D	-	0	0	4,000	60,000	28,000	0	
GCM216R71H472KA37D	-	0	0	4,000	12,000	4,000	0	
GCM216R71H472KA37J	-	0	0	10,000	10,000	0	0	
GCM216R71H822KA37D	-	0	0	0	4,000	0	0	

GCM216R72A102KA37D	-	0	0	12,000	468,000	236,000	292,000	
GCM216R72A103KA37D	-	0	196,000	0	284,000	4,000	4,000	
GCM216R72A103KA37J	-	0	0	0	60,000	0	0	
GCM216R72A222KA37D	-	0	0	8,000	144,000	480,000	256,000	
GCM216R72A223KA37D	-	0	0	4,000	400,000	1,372,000	1,412,000	
GCM216R72A332KA37D	-	0	0	0	8,000	0	0	
GCM216R72A472KA37D	-	0	0	4,000	0	0	0	
GCM216R72A472KA37J	-	0	0	0	0	20,000	0	
GCM219R71C684KA37D	-	0	0	0	4,000	0	0	
GCM219R71E474KA55D	-	4,304,000	6,016,000	6,012,000	1,152,000	8,000	0	
GCM219R71H153KA37J	-	20,000	0	0	0	0	0	
GCM219R71H333KA37D	-	0	0	12,000	12,000	0	0	
GCM219R71H334KA55D	-	0	0	8,000	8,000	4,000	0	
GCM219R72A102KA37D	-	0	0	0	4,000	0	0	
GCM219R72A222KA37D	-	0	0	0	4,000	0	0	
GCM219R72A332KA37D	-	0	0	0	4,000	0	0	
GCM219R72A333KA37D	-	0	8,000	4,000	4,000	0	0	
GCM219R72A392MA37D	-	0	0	0	20,000	0	0	
GCM219R72A472KA37D	-	52,000	20,000	0	16,000	32,000	16,000	
GCM219R72A682KA37D	-	0	0	4,000	12,000	0	0	
GCM21BL81E474KA37L	-	0	0	3,000	0	0	0	
GCM21BL81H104KA37L	-	0	0	0	0	3,000	0	
GCM21BL81H224KA37K	-	0	0	0	0	300,000	280,000	
GCM21BL81H224KA37L	-	1,590,000	1,059,000	840,000	1,434,000	2,091,000	456,000	
GCM21BL81H334KA56L	-	0	0	0	3,000	0	0	
GCM21BR71C334KA37L	-	9,000	0	3,000	0	0	0	
GCM21BR71C474KA37L	-	0	0	12,000	3,000	0	0	
GCM21BR71C684KA37L	-	129,000	0	0	3,000	0	0	
GCM21BR71E104KA37L	-	0	0	3,000	0	9,000	0	
GCM21BR71E684KA55L	-	0	0	3,000	0	0	0	
GCM21BR71H104JA37L	-	0	0	3,000	0	9,000	0	
GCM21BR71H104KA37K	-	6,230,000	(60,000)	0	1,770,000	1,200,000	400,000	
GCM21BR71H104KA37L	-	0	0	48,000	141,000	1,359,000	189,000	
GCM21BR71H104MA37L	-	0	0	3,000	6,000	9,000	0	
GCM21BR71H154KA37L	-	0	0	0	3,000	0	0	
GCM21BR71H223KA37L	-	0	0	0	3,000	0	0	
GCM21BR71H224KA37K	-	0	0	10,000	0	30,000	20,000	
GCM21BR71H224KA37L	-	396,000	84,000	0	3,000	939,000	3,000	
GCM21BR71H333KA37K	-	20,000	0	0	0	0	0	
GCM21BR71H473KA37K	-	0	0	0	10,000	30,000	0	
GCM21BR71H473KA37L	-	0	1,320,000	3,000	78,000	1,140,000	0	
GCM21BR71H474KA55K	-	0	0	10,000	40,000	20,000	0	
GCM21BR71H474KA55L	-	18,000	6,000	9,000	78,000	108,000	24,000	
GCM21BR72A103KA37L	-	0	0	3,000	6,000	3,000	0	
GCM21BR72A104JA37L	-	0	0	0	3,000	6,000	0	
GCM21BR72A104KA37K	-	1,200,000	4,740,000	0	50,000	140,000	520,000	
GCM21BR72A104KA37L	-	4,728,000	837,000	744,000	1,146,000	1,629,000	657,000	
GCM21BR72A223KA37K	-	0	0	0	20,000	10,000	0	
GCM21BR72A223KA37L	-	0	0	0	9,000	6,000	0	
GCM21BR72A473KA37K	-	0	0	0	0	20,000	0	
GCM21BR72A473KA37L	-	48,000	579,000	1,719,000	2,910,000	4,470,000	846,000	
GCM21BR72A683KA37K	-	0	0	0	0	0	0	
GRM033C80G105MEA2D	-	0	0	0	0	0	0	
GRM033C80G224ME15D	-	0	0	0	0	0	0	
GRM033C80G224ME90D	-	0	0	0	0	0	0	
GRM033C80J224KE90D	-	0	0	0	0	0	0	
GRM033C80J224ME90D	-	0	0	0	0	0	0	
GRM033R60G105MEA2D	-	0	0	0	0	0	0	
GRM033R60G155ME14D	-	0	0	0	0	0	0	
GRM033R60G224ME15D	-	0	0	0	0	0	0	
GRM033R60G225ME44D	-	0	0	0	0	0	0	
GRM033R60G225ME47D	-	0	0	0	0	0	0	
GRM033R60G474ME90D	-	0	0	0	0	0	0	

	GRM033R60J105ME11D	-	0	0	0	0	0	0	0	0
	GRM033R60J105MEA2D	-	0	0	0	0	0	0	0	0
	GRM033R60J155ME14D	-	0	0	0	0	0	0	0	0
	GRM033R60J224KE15D	-	0	0	0	0	0	0	0	0
	GRM033R60J224ME15D	-	0	0	0	0	0	0	0	0
	GRM033R60J224ME90D	-	0	0	0	0	0	0	0	0
	GRM033R60J224ME90J	-	0	0	0	0	0	0	0	0
	GRM033R60J225ME15D	-	0	0	0	0	0	0	0	0
	GRM033R60J225ME47D	-	0	0	0	0	0	0	0	0
	GRM033R60J334ME90D	-	0	0	0	0	0	0	0	0
	GRM033R60J474KE90D	-	0	0	0	0	0	0	0	0
	GRM033R60J474ME90D	-	0	0	0	0	0	0	0	0
	GRM033R60J474ME90J	-	0	0	0	0	0	0	0	0
	GRM033R61A105ME15D	-	0	0	0	0	0	0	0	0
	GRM033R61A224KE90D	-	0	0	0	0	0	0	0	0
	GRM033R61A224ME90D	-	0	0	0	0	0	0	0	0
	GRM033R61A224ME90J	-	0	0	0	0	0	0	0	0
	GRM033R61A225ME47D	-	0	0	0	0	0	0	0	0
	GRM155B11H102KA01D	-	0	0	0	0	0	0	0	0
	GRM155B11H272KA01D	-	0	0	0	0	0	0	0	0
	GRM155B31H103KA88D	-	0	0	0	0	0	0	0	0
	GRM155C81E104KA12D	-	0	0	0	0	0	0	0	0
	GRM155R11E103KA01D	-	0	0	0	0	0	0	0	0
	GRM155R11H103KA88D	-	0	0	0	0	0	0	0	0
	GRM155R60J103KA01D	-	0	0	0	0	0	0	0	0
	GRM155R60J104KA01D	-	0	0	0	0	0	0	0	0
	GRM155R60J222KA01D	-	0	0	0	0	0	0	0	0
	GRM155R60J223KA01D	-	0	0	0	0	0	0	0	0
	GRM155R60J472KA01D	-	0	0	0	0	0	0	0	0
	GRM155R60J473KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61A102KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61A103KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61A104JA01D	-	0	0	0	0	0	0	0	0
	GRM155R61A104KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61A104KA01J	-	0	0	0	0	0	0	0	0
	GRM155R61A222KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61A223KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61A273KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61A333KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61A393KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61A472KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61A473KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61A683KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61A823KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61C102KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61C103KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61C104KA88D	-	0	0	0	0	0	0	0	0
	GRM155R61C104KA88J	-	0	0	0	0	0	0	0	0
	GRM155R61C222KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61C223KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61C273KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61C333KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61C472KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61C473KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61C563KA88D	-	0	0	0	0	0	0	0	0
	GRM155R61C683KA88D	-	0	0	0	0	0	0	0	0
	GRM155R61E102KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61E103KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61E104KA87D	-	0	0	0	0	0	0	0	0
	GRM155R61E104KA87J	-	0	0	0	0	0	0	0	0
	GRM155R61E104MA87D	-	0	0	0	0	0	0	0	0
	GRM155R61E222KA01D	-	0	0	0	0	0	0	0	0
	GRM155R61E472KA01D	-	0	0	0	0	0	0	0	0

GRM155R61H102KA01D	-	0	0	0	0	0	0	0	0
GRM155R61H104KE14D	-	0	0	0	0	0	0	0	0
GRM155R61H104KE14J	-	0	0	0	0	0	0	0	0
GRM155R61H222KA01D	-	0	0	0	0	0	0	0	0
GRM155R61H472KA01D	-	0	0	0	0	0	0	0	0
GRM155R62A104KE14D	-	0	0	0	0	0	0	0	0
GRM155R70J103KA01D	-	0	0	0	0	0	0	0	0
GRM155R70J104KA01D	-	0	0	0	0	0	0	0	0
GRM155R70J223KA01D	-	0	0	0	0	0	0	0	0
GRM155R70J472KA01D	-	0	0	0	0	0	0	0	0
GRM155R70J473KA01D	-	0	0	0	0	0	0	0	0
GRM155R71A104JA01D	-	0	0	0	0	0	0	0	0
GRM155R71A104KA01D	-	0	0	0	0	0	0	0	0
GRM155R71A104KA01J	-	0	0	0	0	0	0	0	0
GRM155R71A393KA01D	-	0	0	0	0	0	0	0	0
GRM155R71A473JA01D	-	0	0	0	0	0	0	0	0
GRM155R71A473KA01D	-	0	0	0	0	0	0	0	0
GRM155R71A473KA01J	-	0	0	0	0	0	0	0	0
GRM155R71A563KA01D	-	0	0	0	0	0	0	0	0
GRM155R71A683KA01D	-	0	0	0	0	0	0	0	0
GRM155R71A823KA01D	-	0	0	0	0	0	0	0	0
GRM155R71C102KA01D	-	0	0	0	0	0	0	0	0
GRM155R71C103KA01D	-	0	0	0	0	0	0	0	0
GRM155R71C103KA01J	-	0	0	0	0	0	0	0	0
GRM155R71C103MA01D	-	0	0	0	0	0	0	0	0
GRM155R71C104JA88D	-	0	0	0	0	0	0	0	0
GRM155R71C104JA88J	-	0	0	0	0	0	0	0	0
GRM155R71C104KA88D	-	0	0	0	0	0	0	0	0
GRM155R71C104KA88J	-	0	0	0	0	0	0	0	0
GRM155R71C104MA88D	-	0	0	0	0	0	0	0	0
GRM155R71C123KA01D	-	0	0	0	0	0	0	0	0
GRM155R71C153JA01D	-	0	0	0	0	0	0	0	0
GRM155R71C153KA01D	-	0	0	0	0	0	0	0	0
GRM155R71C153KA01J	-	0	0	0	0	0	0	0	0
GRM155R71C183JA01D	-	0	0	0	0	0	0	0	0
GRM155R71C222KA01D	-	0	0	0	0	0	0	0	0
GRM155R71C223JA01D	-	0	0	0	0	0	0	0	0
GRM155R71C223KA01D	-	0	0	0	0	0	0	0	0
GRM155R71C223KA01J	-	0	0	0	0	0	0	0	0
GRM155R71C273KA01D	-	0	0	0	0	0	0	0	0
GRM155R71C333KA01J	-	0	0	0	0	0	0	0	0
GRM155R71C393KA01J	-	0	0	0	0	0	0	0	0
GRM155R71C472KA01D	-	0	0	0	0	0	0	0	0
GRM155R71C473JA01D	-	0	0	0	0	0	0	0	0
GRM155R71C473KA01D	-	0	0	0	0	0	0	0	0
GRM155R71C473KA01J	-	0	0	0	0	0	0	0	0
GRM155R71C563KA88D	-	0	0	0	0	0	0	0	0
GRM155R71C683KA88J	-	0	0	0	0	0	0	0	0
GRM155R71C822KA01D	-	0	0	0	0	0	0	0	0
GRM155R71E103JA01D	-	0	0	0	0	0	0	0	0
GRM155R71E103JA01J	-	0	0	0	0	0	0	0	0
GRM155R71E103KA01D	-	0	0	0	0	0	0	0	0
GRM155R71E103KA01J	-	0	0	0	0	0	0	0	0
GRM155R71E103MA01D	-	0	0	0	0	0	0	0	0
GRM155R71E104KE14D	-	0	0	0	0	0	0	0	0
GRM155R71E104KE14J	-	0	0	0	0	0	0	0	0
GRM155R71E104ME14D	-	0	0	0	0	0	0	0	0
GRM155R71E123KA61D	-	0	0	0	0	0	0	0	0
GRM155R71E183KA61D	-	0	0	0	0	0	0	0	0
GRM155R71E222KA01D	-	0	0	0	0	0	0	0	0
GRM155R71E223JA61D	-	0	0	0	0	0	0	0	0
GRM155R71E223KA61D	-	0	0	0	0	0	0	0	0
GRM155R71E223KA61J	-	0	0	0	0	0	0	0	0

GRM188R70J474KA01D	-	0	0	0	0	0	0	0	0
GRM188R71A224KA01D	-	0	0	0	0	0	0	0	0
GRM188R71A224KA01J	-	0	0	0	0	0	0	0	0
GRM188R71A334KA61D	-	0	0	0	0	0	0	0	0
GRM188R71A474KA61D	-	0	0	0	0	0	0	0	0
GRM188R71A564KA61D	-	0	0	0	0	0	0	0	0
GRM188R71C123KA01D	-	0	0	0	0	0	0	0	0
GRM188R71C124KA01D	-	0	0	0	0	0	0	0	0
GRM188R71C154KA01D	-	0	0	0	0	0	0	0	0
GRM188R71C183KA01D	-	0	0	0	0	0	0	0	0
GRM188R71C184KA01D	-	0	0	0	0	0	0	0	0
GRM188R71C223JA01D	-	0	0	0	0	0	0	0	0
GRM188R71C224KA01D	-	0	0	0	0	0	0	0	0
GRM188R71C274KA01D	-	0	0	0	0	0	0	0	0
GRM188R71C334KA01D	-	0	0	0	0	0	0	0	0
GRM188R71C473KA01J	-	0	0	0	0	0	0	0	0
GRM188R71C474KA88D	-	0	0	0	0	0	0	0	0
GRM188R71C474KA88J	-	0	0	0	0	0	0	0	0
GRM188R71C683JA01D	-	0	0	0	0	0	0	0	0
GRM188R71E124KA01D	-	0	0	0	0	0	0	0	0
GRM188R71E154KA01D	-	0	0	0	0	0	0	0	0
GRM188R71E184KA88D	-	0	0	0	0	0	0	0	0
GRM188R71E224KA88D	-	0	0	0	0	0	0	0	0
GRM188R71E224KA88J	-	0	0	0	0	0	0	0	0
GRM188R71E392KA01D	-	0	0	0	0	0	0	0	0
GRM188R71E473KAAKJ	-	0	0	0	0	0	0	0	0
GRM188R71H102JA01D	-	0	0	0	0	0	0	0	0
GRM188R71H104KA93D	-	0	0	0	0	0	0	0	0
GRM188R71H104KA93J	-	0	0	0	0	0	0	0	0
GRM188R71H153JA01D	-	0	0	0	0	0	0	0	0
GRM188R71H271KA01D	-	0	0	0	0	0	0	0	0
GRM188R71H331KA01D	-	0	0	0	0	0	0	0	0
GRM188R71H471JA01D	-	0	0	0	0	0	0	0	0
GRM188R71H471MA01D	-	0	0	0	0	0	0	0	0
GRM188R71H683KA93J	-	0	0	0	0	0	0	0	0
GRM188R71H822KA01D	-	0	0	0	0	0	0	0	0
GRM188R72A102JA01D	-	0	0	0	0	0	0	0	0
GRM188R72A102KA01D	-	0	0	0	0	0	0	0	0
GRM188R72A102KA01J	-	0	0	0	0	0	0	0	0
GRM188R72A102MA01D	-	0	0	0	0	0	0	0	0
GRM188R72A122KA01D	-	0	0	0	0	0	0	0	0
GRM188R72A152KA01D	-	0	0	0	0	0	0	0	0
GRM188R72A153KAC4D	-	0	0	0	0	0	0	0	0
GRM188R72A182KA01D	-	0	0	0	0	0	0	0	0
GRM188R72A221KA01D	-	0	0	0	0	0	0	0	0
GRM188R72A221KA01J	-	0	0	0	0	0	0	0	0
GRM188R72A222KA01D	-	0	0	0	0	0	0	0	0
GRM188R72A223KAC4D	-	0	0	0	0	0	0	0	0
GRM188R72A272KA01D	-	0	0	0	0	0	0	0	0
GRM188R72A331KA01D	-	0	0	0	0	0	0	0	0
GRM188R72A332KA01D	-	0	0	0	0	0	0	0	0
GRM188R72A332KA01J	-	0	0	0	0	0	0	0	0
GRM188R72A471KA01D	-	0	0	0	0	0	0	0	0
GRM188R72A561KA01D	-	0	0	0	0	0	0	0	0
GRM188R72A681KA01D	-	0	0	0	0	0	0	0	0
GRM188R72A821JA01D	-	0	0	0	0	0	0	0	0
GRM188R72A821KA01D	-	0	0	0	0	0	0	0	0
GRM188R72A822KA01D	-	0	0	0	0	0	0	0	0
GRM216R71C473KA01D	-	0	0	0	0	0	0	0	0
GRM216R71E102KA01D	-	0	0	0	0	0	0	0	0
GRM216R71E223KA01D	-	0	0	0	0	0	0	0	0
GRM216R71E332KA01D	-	0	0	0	0	0	0	0	0
GRM216R71H122KA01D	-	0	0	0	0	0	0	0	0

