



Product Change Notification

● Purpose

We would like to notify customers of the following changes to several Sharp dust sensor models:

- New suppliers of a capacitor used inside dust sensor will be added.
- The case material for some dust sensor models will be changed.

These changes are being done in order to stabilize production.

The specifications and reliability will not be changed as a result of this PCN.

There is no change to dust sensor model numbers.

● Effective Time of Change

These are running changes that will be applied starting in December, 2019.

● Details

Please refer to the pages that follow for the details of the capacitor and case material changes.

If you have any questions concerning this notification, please contact your Socle representatives at: Socle_Sales_NA@socle-tech.com

SHARP Products Change Notification

SHARP Fukuyama Semiconductor Co., Ltd.

Thank you very much for adopting our products.
We inform products change notification as follows;

Semiconductor Business Unit

Sensor Sales
Planning Div.



Subject	<u>Announcement of capacitor supplier and case material for dust sensor</u>
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Applicable Product Category	Dust Sensors (7 models)
Changed From	Running change since December 2019 onward (Timing might be updated by market demands)

Please be informed that some suppliers of capacitor mounted on dust sensor which will be added to stable the production.

Also, the case material of the digital output dust sensor will be changed.
Please kindly agree this "product change notification".

1. Applicable Model and Changes

	Model	Added capacity supplier	Case material change	Note
1	GP2Y1010AU0F	Murata + added Walsin	Not change	
2	GP2Y1011AU0F	Murata + added Walsin	Not change	
3	GP2Y1012AU0F	Murata + added Walsin	Not change	
4	GP2Y1014AU0F	Murata + added Walsin	Not change	
5	GP2Y1023AU0F	Murata + added Walsin	Change	
6	GP2Y1024AU0F	Murata + added Walsin	Change	
7	GP2Y1026AU0F	Not change	Change	

※Please refer to the attachment document(comparison sheet) for details/

2. Reason of changes

In order to stably supply.

The specification and reliability will be not affected by this PCN

Comparison sheet on added capacitor

SHARP Fukuyama Semiconductor Co., Ltd.

Semiconductor Business Unit

Applicable Product Category : Dust Sensors

Model : GP2Y1010AU0F、GP2Y1011AU0F、GP2Y1012AU0F、GP2Y1014AU0F、
GP2Y1023AU0F、GP2Y1024AU0F

	Current MLCC	Combine use of Current and New MLCC
Supplier name	Murata manufacturing co.,Ltd	Walsin Technology Corporation
Model name	GRM39CH471J50	0603N471J500CT
Size code	1608	
Volume	470pF	
Voltage	50 V dc	
Temp.characteristic	CH(JIS standard)	NP0(MILstandard)
	$\pm 60\text{ppm}/^{\circ}\text{C}$ (+20~+125°C)	$\pm 30\text{ppm}/^{\circ}\text{C}$ (-55~+125°C)
Tolerance	$\pm 5\%$	
operating temperature	-55 ~ +125 °C	

Model : GP2Y1023AU0F、GP2Y1024AU0F

	Current MLCC	Combine use of Current and New MLCC
Supplier name	Murata manufacturing co.,Ltd	Walsin Technology Corporation
Model name	GRM188B11C104KA01D	0603B104K160CT
Size code	1608	
Volume	0.1 μF	
Voltage	16 V dc	
Temp.characteristic	B(JIS standard)	X7R(EIA standard)
	$\pm 10\%$ (-25~+85°C)	$\pm 15\%$ (-55~+125°C)
Tolerance	$\pm 10\%$	
operating temperature	-25 ~ +85 °C	-55 ~ +125 °C

Comparison sheet related on material change for SHARP dust sensor

【Applicable Model】 GP2Y1010AU0F、GP2Y1011AU0F、GP2Y1012AU0F、GP2Y1014AU0F

SHARP Fukuyama Semiconductor Co., Ltd.
Semiconductor Business Unit

			Current Product	New product
Business Model No.			SAME	
SHARP Internal Model No.			SAME	
Country of Origin ／ Manufacturing Location			SAME (China or Indonesia ／ Zhuhai Ensei Electronics Co., Ltd. or P. T. Sharp Semiconductor Indonesia)	
Materials	capacitor	Supplier	Murata manufacturing co.,Ltd	Murata manufacturing co.,Ltd or Walsin Technology Corporation
		Size	1608 (SAME)	
		Capacitance	470pF (SAME)	
	Other materials		SAME	
Electronic spec. (Including absolute maximum rating.)			SAME	
QC process			SAME	
Product Reliability			SAME	
Outline Dimension / Marking			SAME	
Package spec			SAME	

Comparison sheet related on material change for SHARP dust sensor

【Applicable Model】 GP2Y1023AU0F、GP2Y1024AU0F

SHARP Fukuyama Semiconductor Co., Ltd.
Semiconductor Business Unit

			Current Product	New product
Business Model No.			SAME	
SHARP Internal Model No.			SAME	
Country of Origin ／ Manufacturing Location			SAME (China or Indonesia ／ Zhuhai Ensei Electronics Co., Ltd. or P. T. Sharp Semiconductor Indonesia)	
Materials	Capacitor ①	Supplier	Murata manufacturing co.,Ltd	Murata manufacturing co.,Ltd or Walsin Technology Corporation
		Size	1608 (SAME)	
		Capacitance	470pF (SAME)	
	Capacitor ②	Supplier	Murata manufacturing co.,Ltd	Murata manufacturing co.,Ltd or Walsin Technology Corporation
		Size	1608 (SAME)	
		Capacitance	0. 1uF (SAME)	
	Case materials	Supplier	SAME	
		素材	ABS (SAME)	
		Part number	Different (not disclosed)	
	Other materials		SAME	
Electronic spec. (Including absolute maximum rating.)			SAME	
QC process			SAME	
Product Reliability			SAME	
Package spec			SAME	

Comparison sheet related on material change for SHARP dust sensor

【Applicable Model】 GP2Y1026AU0F

SHARP Fukuyama Semiconductor Co., Ltd.
Semiconductor Business Unit

			Current Product	New product
Business Model No.			GP2Y1026AU0F (SAME)	
SHARP Internal Model No.			GP2Y1026AUF6 (SAME)	
Country of Origin / Manufacturing Location			SAME (China / Zhuhai Ensei Electronics Co., Ltd.)	
Materials	case materials	Supplier	SAME	
		Material	ABS (SAME)	
		Part number	Different (not disclosed)	
	Other materials		SAME	
Electronic spec. (Including absolute maximum rating.)			SAME	
QC process			SAME	
Product Reliability			SAME	
Package spec			SAME	