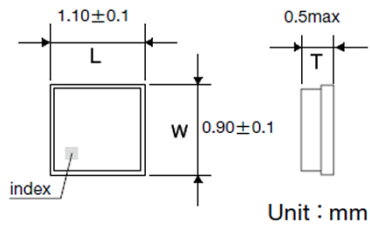


FBAR/SAW Devices (SAW Type)

F6QA1G585M2AT



■ Features

- Item Summary
SAW, 1.1x0.9x0.5mm
- Lifecycle Stage
Mass Production
- Standard packaging quantity (minimum)
Taping Embossed 5000 , 15000pcs

■ Products characteristics table

System	GPS
Type	SAW
Function	Other
band	Other
Insertion Loss (typ)	1.4 dB
Operating Temp. Range	-30 to +85 °C
RoHS2 Compliance (10 subst.)	Yes
REACH Compliance (173 subst.)	Yes
Halogen Free	Yes
Soldering	Reflow

■ External Dimensions

Dimension L	1.1 ± 0.10 mm
Dimension W	0.9 ± 0.10 mm
Dimension T	Max 0.5 mm

2017.11.19

The data is reference only. Electrical characteristics vary depending on environment or measurement condition.
 TAIYO YUDEN reserves the right to make change to the data at any time without notice.
 Before making final selection, please check product specification.



*Pb Free part

Customer Name	Standard specifications	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GPS+GLONASS (Unbalance 50/50 ohm)	Date	Sep. 5, 2012
Part Number	F6QA1G585M2AT	Version 1.0a	FINAL

Table 1.Electrical specifications

Passband:1565.42 ~ 1605.886 MHz						
Parameter	Frequency	Specification			Unit	Remarks
		Min.	Typ.	Max.		
Operating temperature		-30	-	+85	°C	
Insertion loss	1574.42-1576.42 MHz	-	1.1	1.4	dB	(*1)
Insertion loss	1565.42-1585.42 MHz		1.4	1.7	dB	(*1)
Insertion loss	1597.5515-1605.886 MHz	-	1.1	1.7	dB	(*1)
VSWR(input/output)	1574.42-1576.42 MHz	-	1.2	2.0	-	
	1565.42-1585.42 MHz		1.5	2.0	-	
	1597.5515-1605.886 MHz	-	1.5	2.0	-	
Absolute Attenuation	10 – 925 MHz	32	35	-	dB	
	925 – 960 MHz	32	35	-	dB	
	1427 – 1463 MHz	32	37	-	dB	
	1710 – 1785 MHz	32	39	-	dB	
	1850 – 1910 MHz	31	37	-	dB	
	1920 – 1980 MHz	31	36	-	dB	
	2401 – 2483 MHz	32	37	-	dB	
	2500 – 2570 MHz	32	36	-	dB	
Input impedance		50//36nH			ohm	
Output impedance		50			ohm	
Device Size		1.1typ. x 0.9typ. x 0.5max.			mm	

(*1) Specification of insertion loss includes loss that comes from the test board (0.1dB).

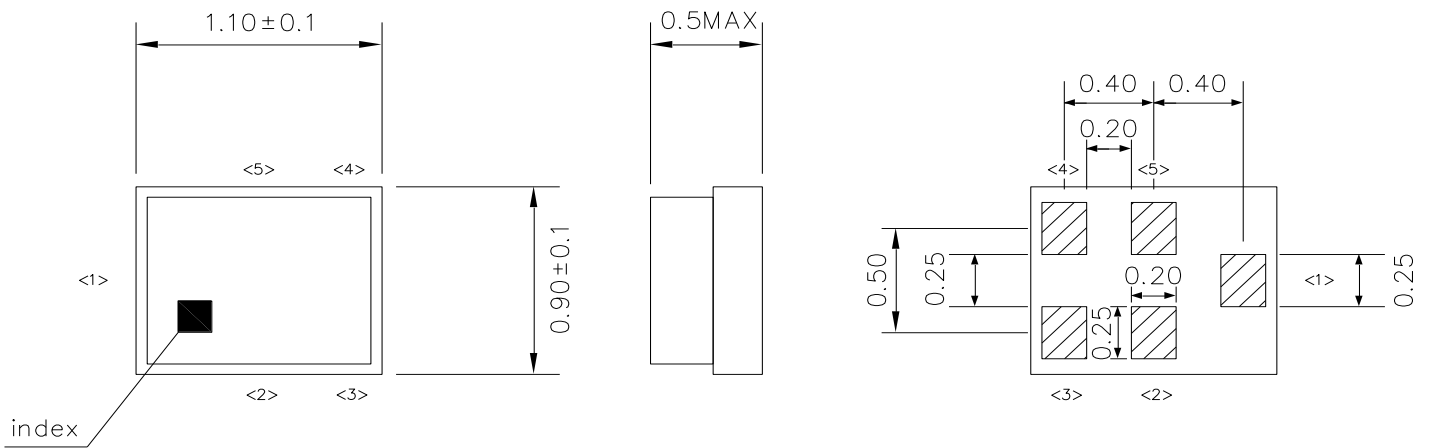


*Pb Free part

Customer Name	Standard specifications	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	GPS+GLONASS (Unbalance 50/50 ohm)	Date	Sep. 5, 2012
Part Number	F6QA1G585M2AT	Version 1.0a	FINAL

Dimensions

Device size: 1.1typ. x 0.9typ. x 0.5max.

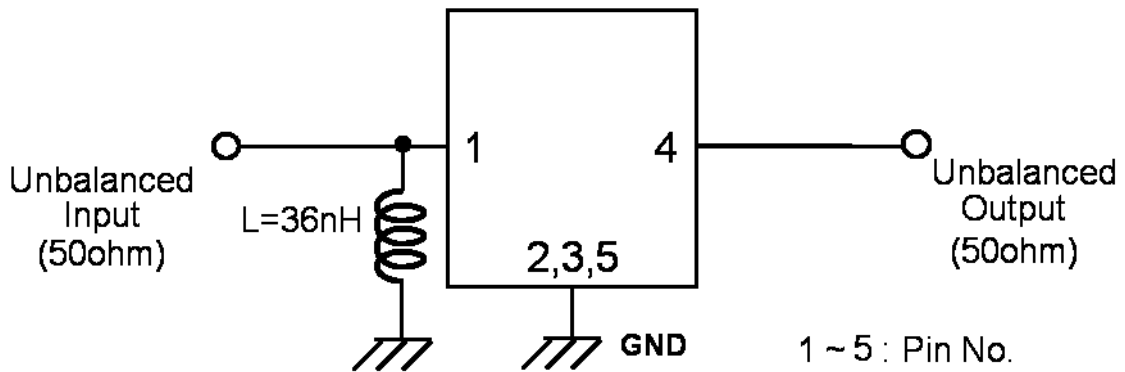


Unit: mm

Pin Configuration

Pin No.	Pin name	Description
1	IN	Unbalanced pin
2	GND	Ground
3	GND	Ground
4	OUT	Unbalanced pin
5	GND	Ground

Evaluation Circuit





*Pb Free part

Customer Name	Standard specifications	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GPS+GLONASS (Unbalance 50/50 ohm)	Date	Sep. 5, 2012
Part Number	F6QA1G585M2AT	Version 1.0a	FINAL

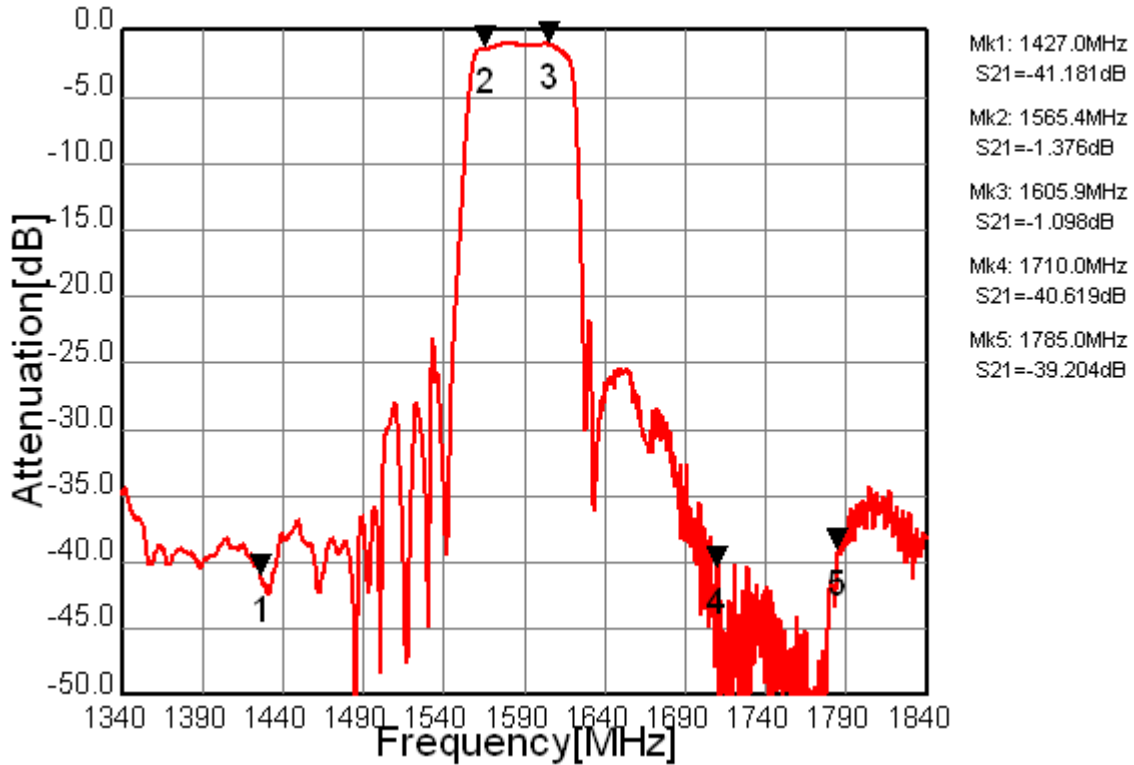


Fig.1 Pass-band Characteristics

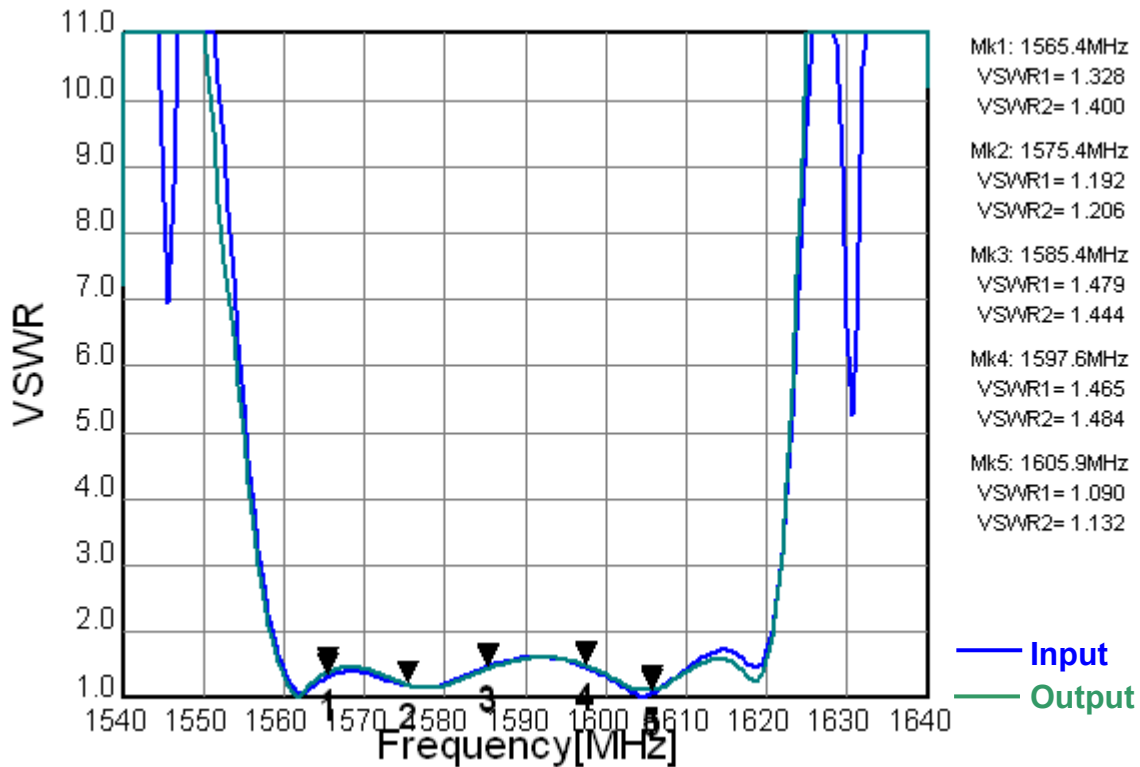


Fig.2 VSWR



*Pb Free part

Customer Name	Standard specifications	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GPS+GLONASS (Unbalance 50/50 ohm)	Date	Sep. 5, 2012
Part Number	F6QA1G585M2AT	Version 1.0a	FINAL

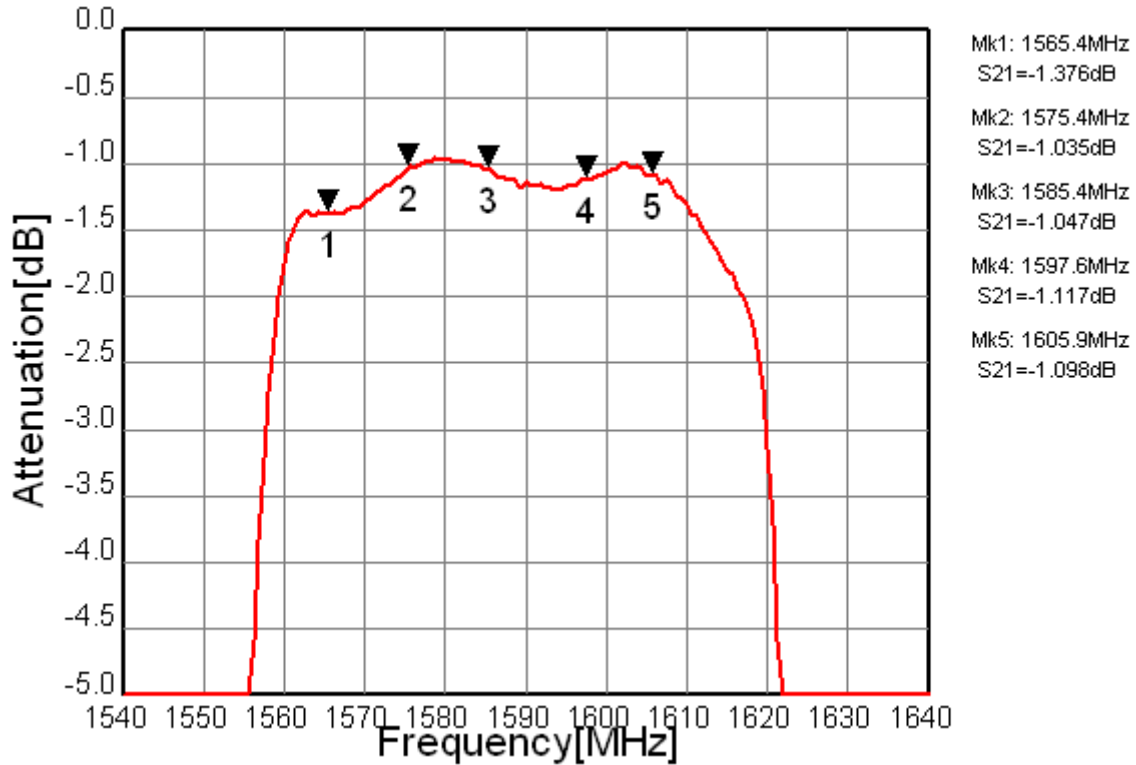


Fig.3 In-band Characteristics

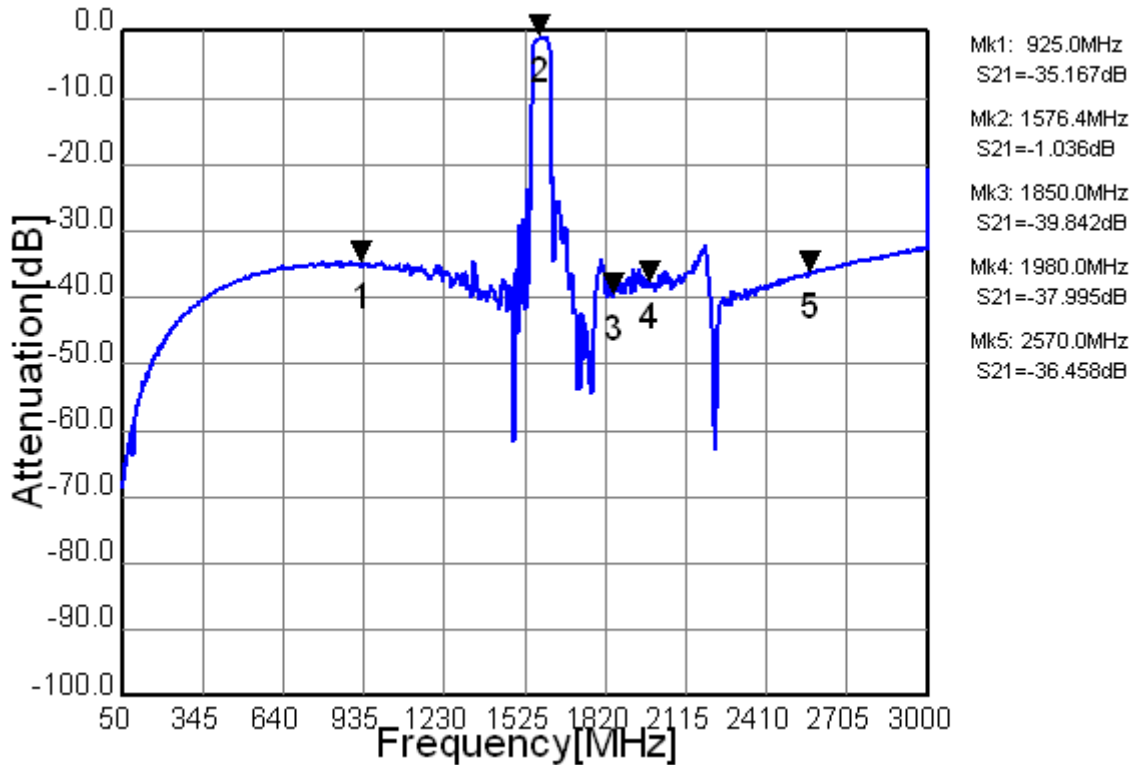


Fig.4 Wide-band Characteristics



RoHS MSL1

*Pb Free part

Customer Name	Standard specifications	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GPS+GLONASS (Unbalance 50/50 ohm)	Date	Sep. 5, 2012
Part Number	F6QA1G585M2AT	Version 1.0a	FINAL

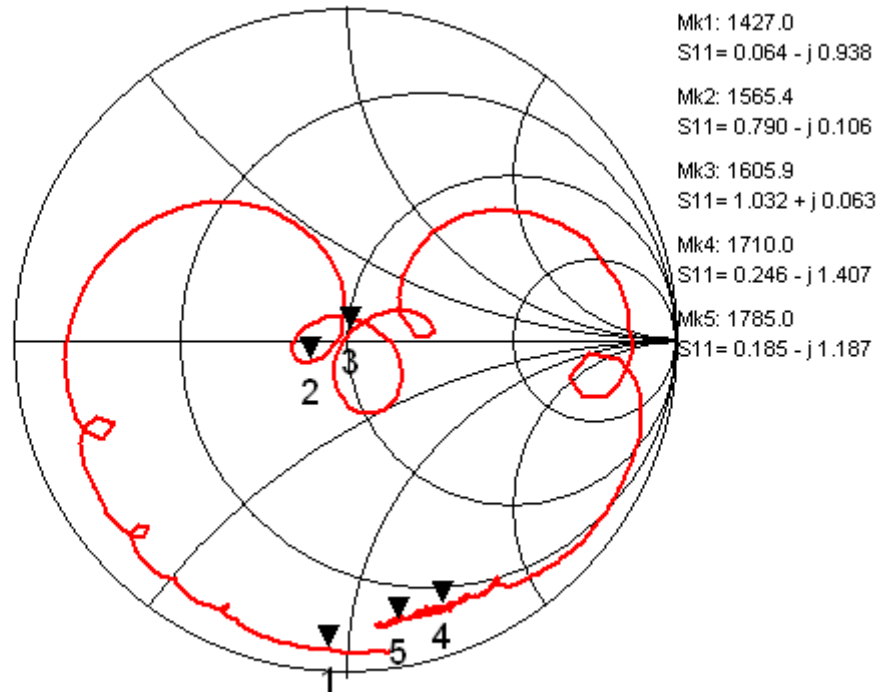


Fig.5 Input Impedance

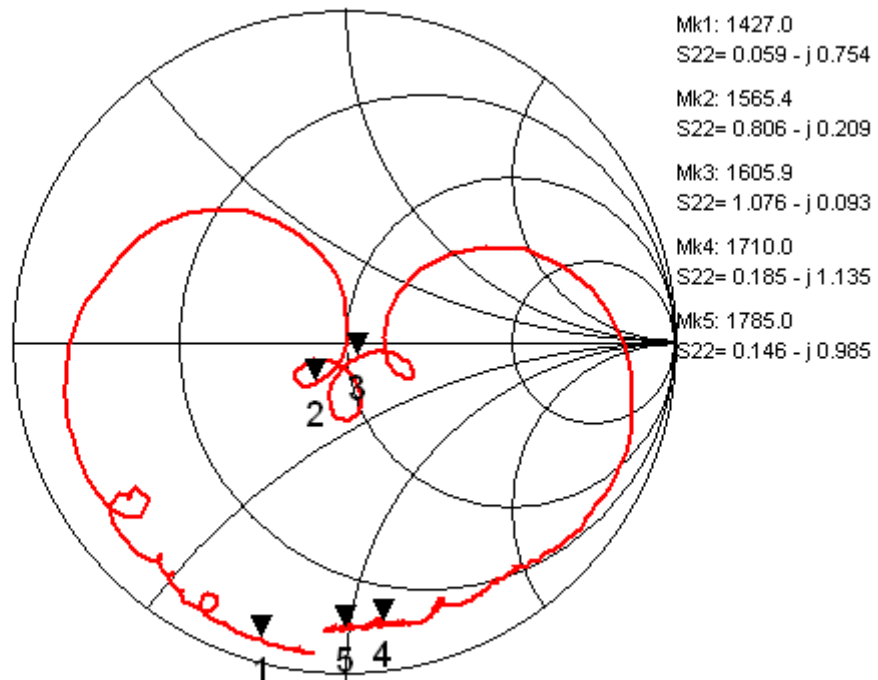


Fig.6 Output Impedance



*Pb Free part

Customer Name	Standard specifications	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	GPS+GLONASS (Unbalance 50/50 ohm)	Date	Sep. 5, 2012
Part Number	F6QA1G585M2AT	Version 1.0a	FINAL

Ordering Code

Ordering Code	Packing	Reel size	Status
F6QA1G585M2AT-J	Tape & Reel	5,000pcs.	MP
F6QA1G585M2AT-JA	Tape & Reel	less than 5,000 pcs.	MP
F6QA1G585M2AT-Y	Tape & Reel	15,000pcs	MP
F6QA1G585M2AT-YA	Tape & Reel	less than 15,000 pcs.	MP
F6QA1G585M2AT-Q	Bulk	few pcs.	MP

*Minimum order quantity (MOQ) is assigned for each inquiry, Please contact to Sales Representatives.

*MP: Mass Production

Notice

All of the contents specified herein are subject to change without notice due to technical improvements, etc.

Please contact TAIYO YUDEN Co., Ltd. for further details of product specifications.

Please conduct validation and verification of products in actual condition of mounting and operating environment before commercial shipment of the equipment.

This product is for general electronics equipment such as Audio-Visual equipment, household electronics, office supplies, information services and telecommunications; therefore, in case this product is used for any medical equipment, space equipment, nuclear equipment or disaster prevention equipment, please contact TAIYO YUDEN in advance.

In case this product is used for general electronics equipment or circuits which require high safety and high reliability, thoroughly evaluate on safety and add a protection circuit if necessary.

Please read this notice before using the TAIYO YUDEN products.



REMINDERS

- Please conduct validation and verification of our products in actual condition of mounting and operating environment before using our products.
- The product listed in this spec sheet is intended for use in general electronic equipment (e.g., AV equipment, OA equipment, home electric appliances, office equipment, information and communication equipment including, without limitation, mobile phone, and PC). Please be sure to contact TAIYO YUDEN for further information before using the products for any equipment which may directly cause loss of human life or bodily injury (e.g., transportation equipment including, without limitation, automotive powertrain control system, train control system, and ship control system, traffic signal equipment, disaster prevention equipment, medical equipment classified as Class I, II or III by IMDRF, highly public information network equipment including, without limitation, telephone exchange, and base station).
Please do not incorporate our products into any equipment requiring high levels of safety and/or reliability (e.g., aerospace equipment, aviation equipment, medical equipment classified as Class IV by IMDRF, nuclear control equipment, undersea equipment, military equipment).
When our products are used even for high safety and/or reliability-required devices or circuits of general electronic equipment, it is strongly recommended to perform a thorough safety evaluation prior to use of our products and to install a protection circuit as necessary.
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The product listed in this spec sheet may require specific procedures for export according to “U.S. Export Administration Regulations”, “Foreign Exchange and Foreign Trade Control Law” of Japan, and other applicable regulations. Should you have any questions on this matter, please contact our sales staff.