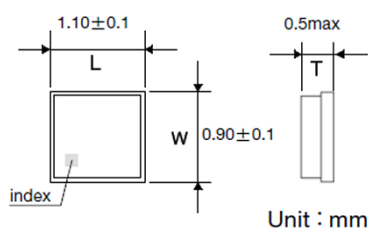


FBAR/SAW Devices (SAW Type)

F6QA1G581M2QZ



■ 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

2017.11.08

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.



MSL1

*Pb Free part

Customer Name	Standard specifications	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GPS + GLONASS + Galileo + Compass	Date	Dec.05, 2013
Part Number	F6QA1G581M2QZ	Version 2.0bB	Final

Table 1.Electrical specifications

Passband:1559.052 ~ 1605.886 MHz						
Parameter	Frequency (MHz)	Specifications			Units	Remarks
		Min.	Typ.	Max.		
Insertion loss	1574.42 – 1576.42	-	1.1	1.5	dB	(*1)
	1565.42 – 1585.42	-	1.5	2.0	dB	(*1)
	1597.552 – 1605.886	-	1.4	2.0	dB	(*1)
	1559.052 – 1563.144	-	1.7	2.0	dB	(*1)
VSWR(Input)	1574.42 – 1576.42	-	1.3	2.0	-	
	1565.42 – 1585.42	-	1.9	2.3	-	
	1597.552 – 1605.886	-	1.5	2.3	-	
	1559.052 – 1563.144	-	1.8	2.3	-	
VSWR(Output)	1574.42 – 1576.42	-	1.3	2.0	-	
	1565.42 – 1585.42	-	1.9	2.3	-	
	1597.552 – 1605.886	-	1.5	2.3	-	
	1559.052 – 1563.144	-	1.8	2.3	-	
Absolute Attenuation	50 – 925	32	36	-	dB	
	925 – 960	32	36	-	dB	
	1427 – 1463	33	39	-	dB	
	1710 – 1785	32	39	-	dB	
	1850 – 1910	32	38	-	dB	
	1920 – 1980	32	37	-	dB	
	2401 – 2483	32	39	-	dB	
	2500 – 2570	31	38	-	dB	
Input impedance		50			ohm	
Output impedance		50			ohm	
Device Size		1.1typ. x 0.9typ. x 0.5max.			mm	
Operating temperature		-30 to +85			°C	

(*1) Specification of insertion loss excludes loss that comes from the test board.

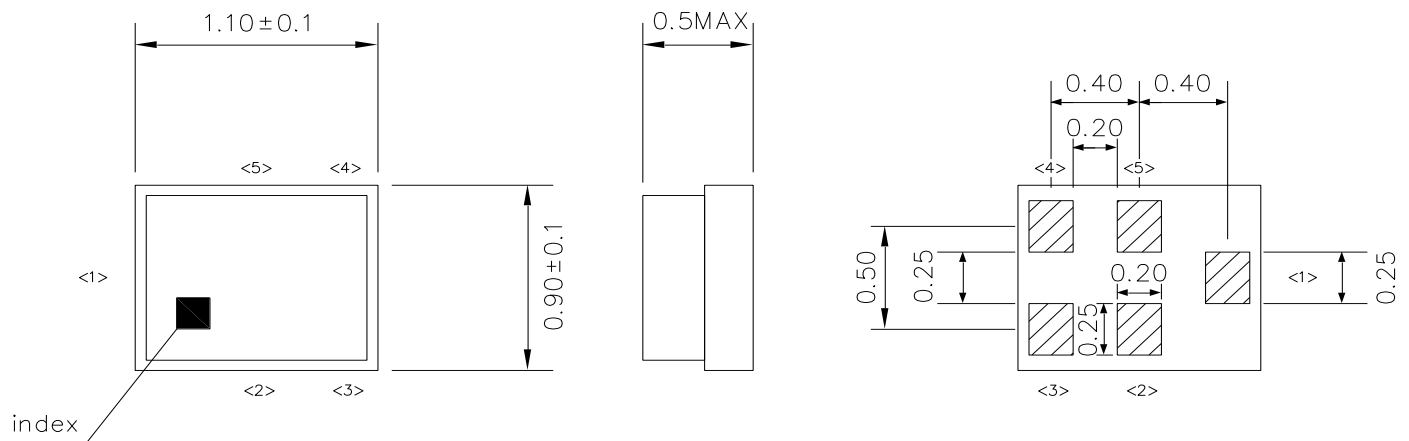


*Pb Free part

Customer Name	Standard specifications	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GPS + GLONASS + Galileo + Compass	Date	Dec.05, 2013
Part Number	F6QA1G581M2QZ	Version 2.0bB	Final

Dimensions

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

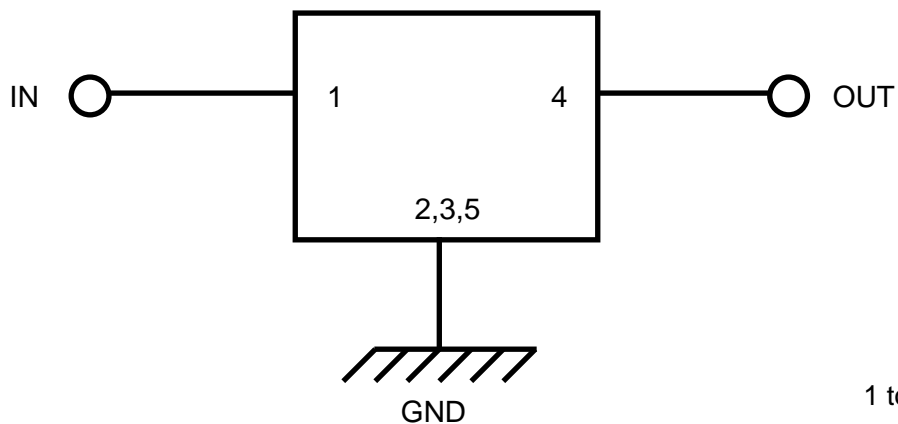


Unit: mm

Pin Configuration

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

Evaluation Circuit



1 to 5: Pin No.



*Pb Free part

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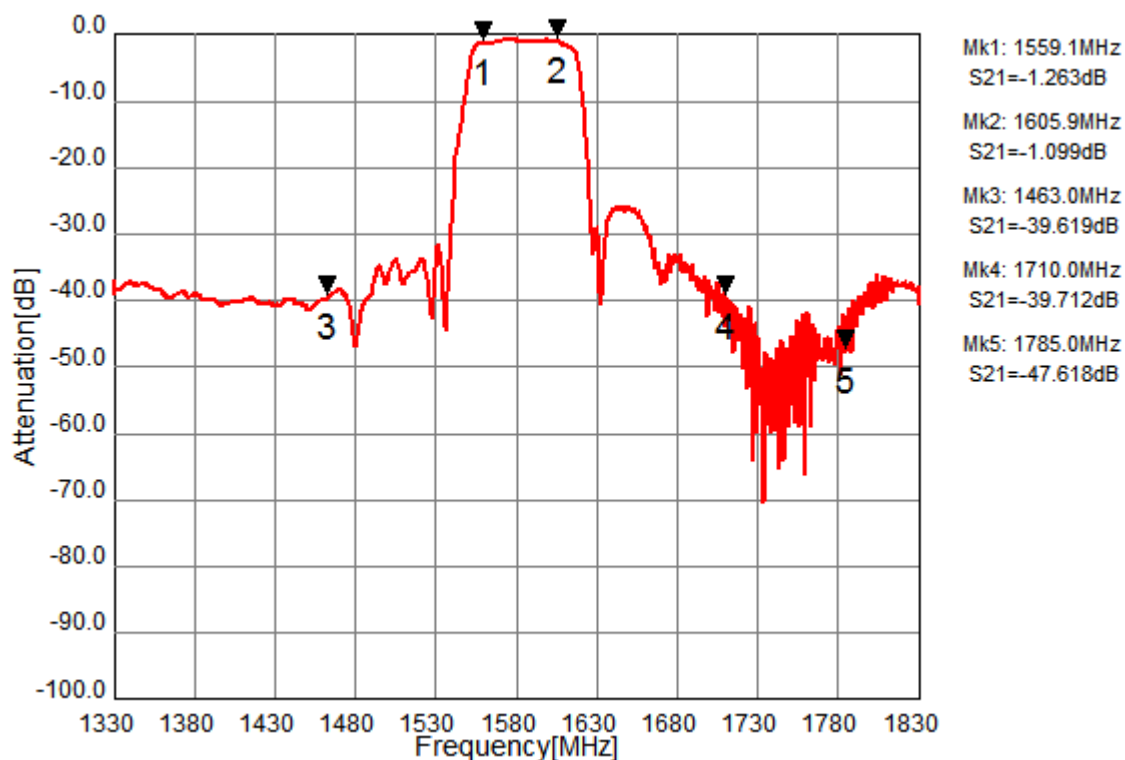


Fig.1 Pass-band Characteristics

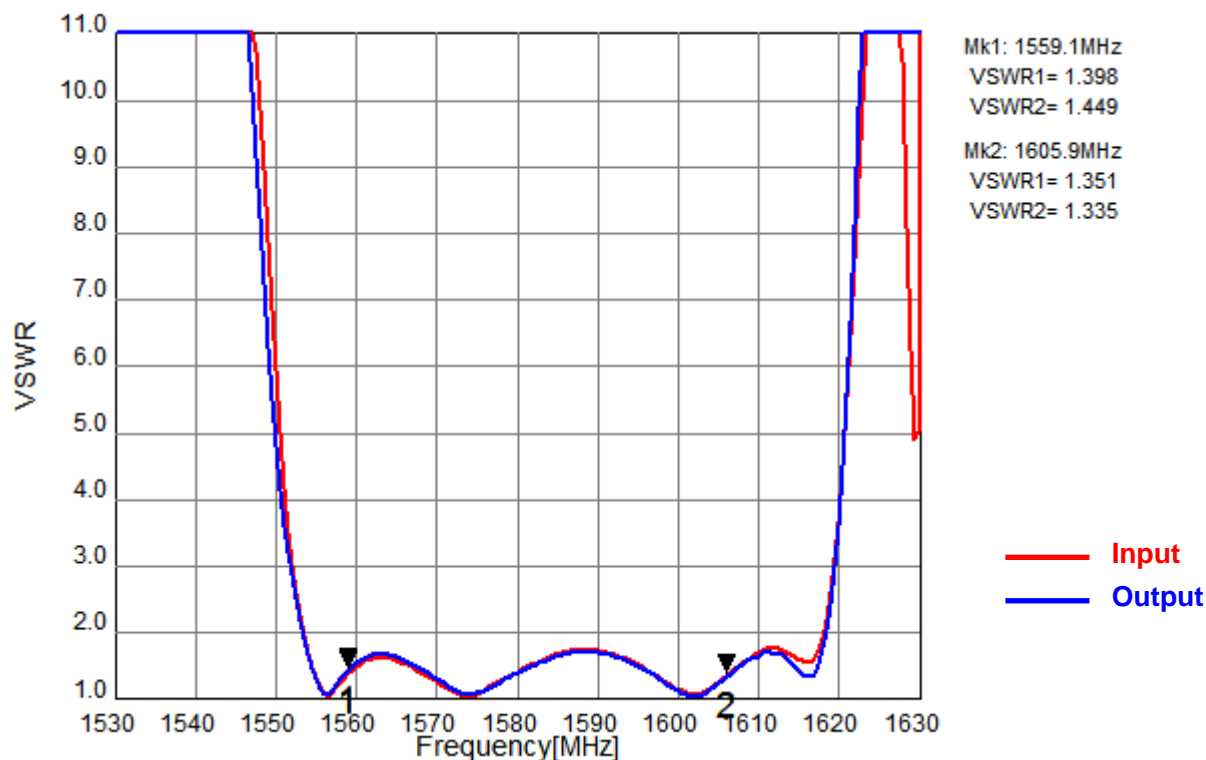


Fig.2 VSWR



MSL1

*Pb Free part

Customer Name	Standard specifications	TAIYO YUDEN Mobile Technology Co.,Ltd.	
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Part Number	F6QA1G581M2QZ	Version 2.0bB	Final

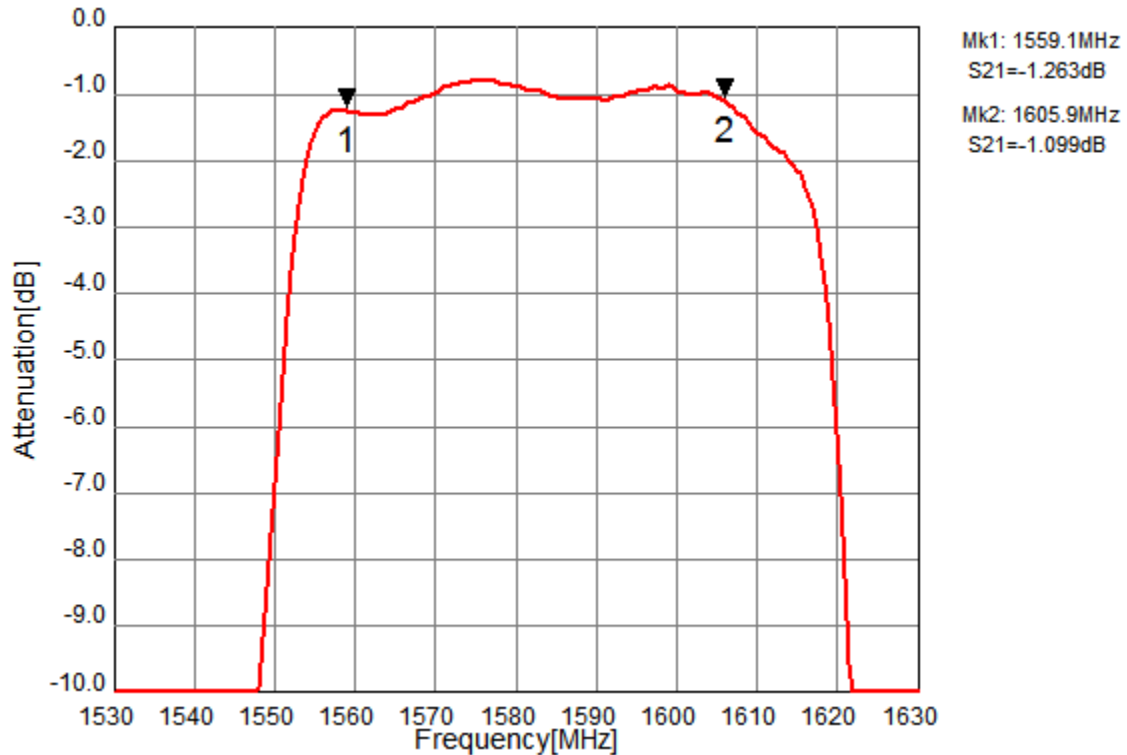


Fig.3 In-band Characteristics

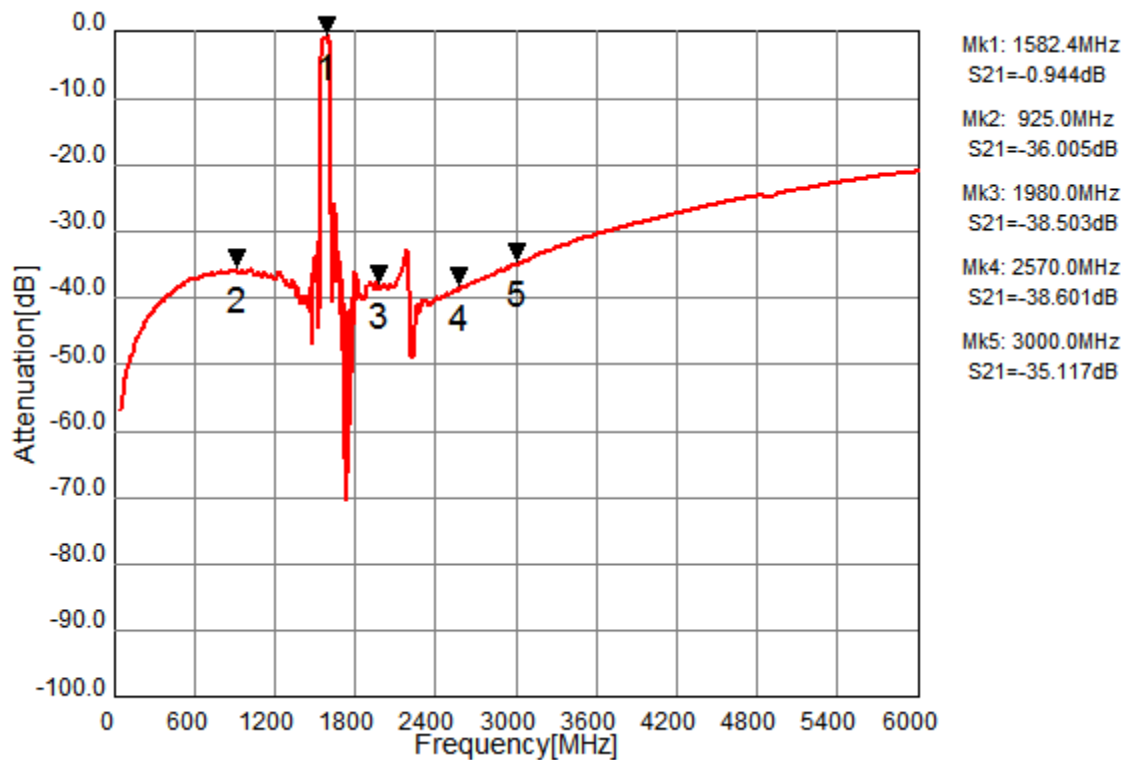
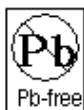


Fig.4 Wide-band Characteristics

TAIYO YUDEN



*Pb Free part

Customer Name	Standard specifications	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GPS + GLONASS + Galileo + Compass	Date	Dec.05, 2013
Part Number	F6QA1G581M2QZ	Version 2.0bB	Final

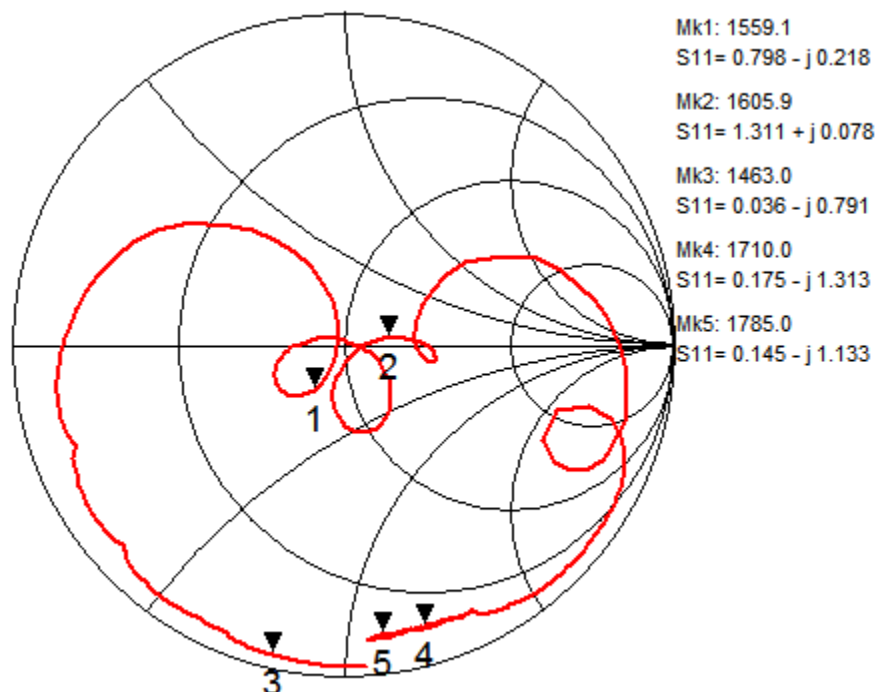


Fig.5 Input Impedance

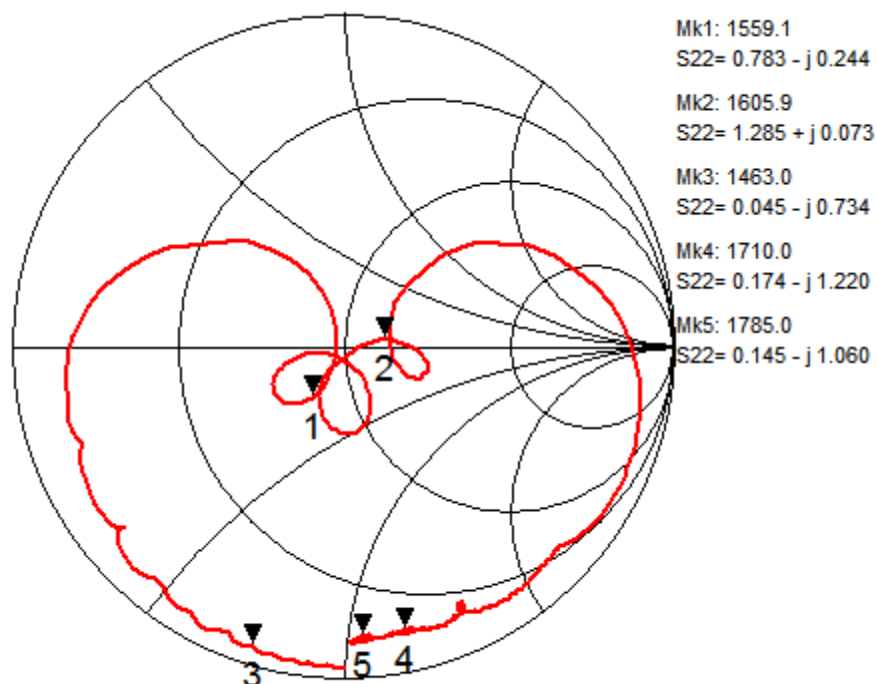


Fig.6 Output Impedance



MSL1

*Pb Free part

Customer Name	Standard specifications	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GPS + GLONASS + Galileo + Compass	Date	Dec.05, 2013
Part Number	F6QA1G581M2QZ	Version 2.0bB	Final

Ordering Code

Ordering Code	Packing	Reel size	Status
F6QA1G581M2QZ-J	Tape & Reel	5,000pcs.	MP
F6QA1G581M2QZ-JA	Tape & Reel	Less than 5,000 pcs.	MP
F6QA1G581M2QZ-Y	Tape & Reel	15,000pcs	MP
F6QA1G581M2QZ-Q	Bulk	few pcs.	MP

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

*MP: Mass Production

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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.

TAIYO YUDEN

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.
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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.