

To: DISTRIBUTION

Issue No. :

October 17, 2019

Product Change Notification

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Communication Devices Business Group
Director, Product Marketing

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Thank You for your business and continued interest in TDK's RF Components.

Name of change	Lifecycle status change from production to NRND for the attached RF Components List
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TDK Part #	ANT016008LCD2442MA1	Recommended Alternative Part #	ANT162442DT-2001A2
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Purpose

This is an official notice of the production status change for the product mentioned above and in the following attached list of product(s). This product has been revised to Not Recommended for New Design or "NRND". NRND is a production status classification that indicates a part number is approaching the end of its product life cycle. It is not End of Life, rather NRND represents the period between mass production and End of Life (EOL). NRND addresses the natural decline in market sales and may identify a consolidation/changing of the product portfolio dependent on market conditions.

TDK will Offer a suggested replacement alternative whenever possible. These suggested alternative components may not be 100% the same in electrical performance and mechanical dimensions. The main objective is to provide suitable alternates from the available TDK RF Components Portfolio. Should you have any questions please contact your TDK Sales Representative for additional support.

Attachment

Schedule : Effective October 17, 2019

Attachment : Yes . No

Multilayer Antenna (Dual Band type)

For 2400-2484MHz / 5150-5850MHz

ANT162442DT-2001A2

1.6x0.8mm [EIA 0603]*

* Dimensions Code JIS[EIA]

Multilayer Antenna

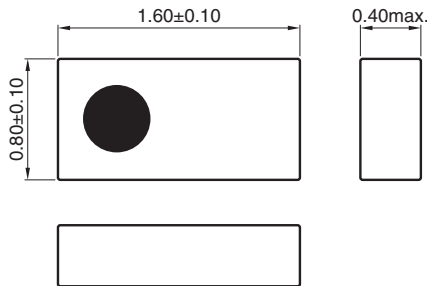
Conformity to RoHS Directive

For 2400-2484MHz / 5150-5850MHz

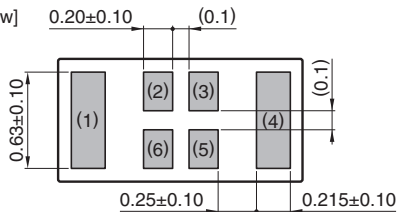
ANT162442DT-2001A2

SHAPES AND DIMENSIONS

[Top view]



[Bottom view]

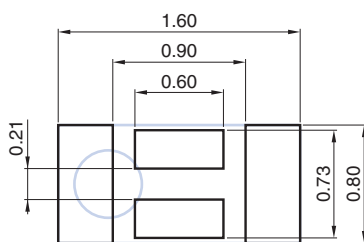


Terminal functions

1	Radiator electrode for 2.4GHz ISM
2	Feed point
3	Feed point
4	Radiator electrode for 5.5GHz
5	Feed point
6	Feed point

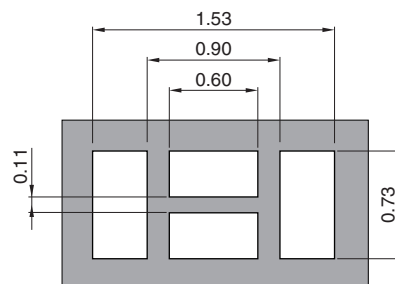
Dimensions in mm

RECOMMENDED LAND PATTERN



Dimensions in mm

SOLDER RESIST PATTERN



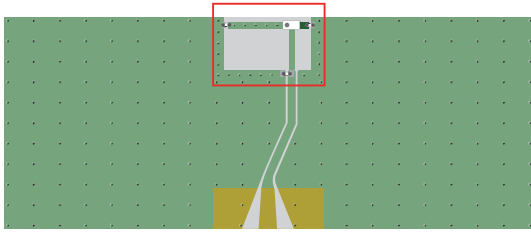
Dimensions in mm

RoHS Directive Compliant Product: See the following for more details. <https://product.tdk.com/info/en/environment/rohs/index.html>

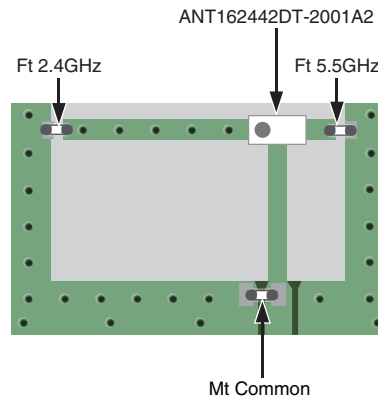
- All specifications are subject to change without notice.
- Before using these products, be sure to request the delivery specifications.

ANT162442DT-2001A2

EVALUATION BOARD

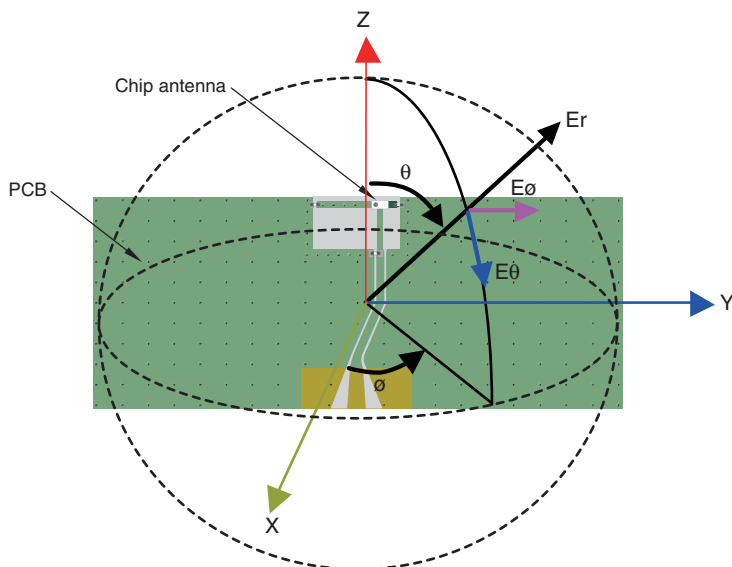


PCB size : 50mm x 20mm x 1mm
 Antenna area : 8 x 5 mm



	Component P/N
Ft 2.4GHz	6.2pF
Ft 5.5GHz	0.4pF
Mt Common	1.3nH(MLG1005S1N3C:TDK)

Measurement condition for Radiation Pattern



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ANT162442DT-2001A2

ELECTRICAL CHARACTERISTICS

Item	Frequency Range (MHz)	Min.	Typ.	Max.
VSWR	2400 to 2484	—	1.54	3.0
	5150 to 5850	—	1.58	3.0
Polarization			Linear	
PCB size (mm)			50×20	
Antenna keep-out area (mm)			8×5	
Characteristic Impedance (Ω)			50 (Nominal)	

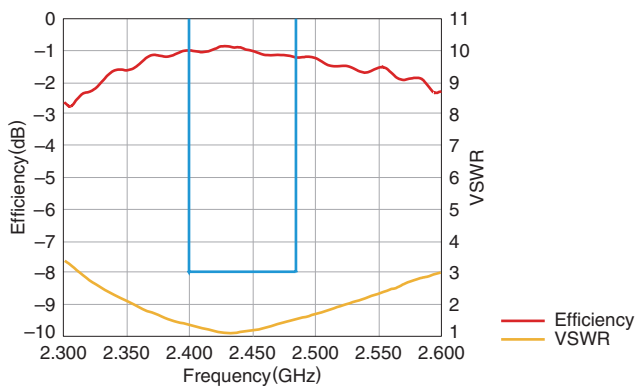
· This is typical antenna performance with the standard PCB.

TEMPERATURE RANGE

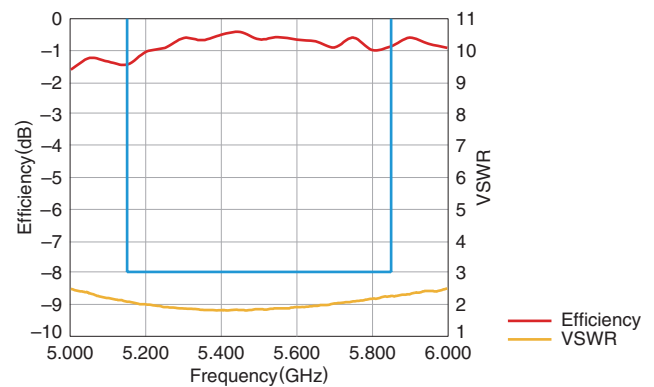
Operating temperature (°C)	Storage temperature (°C)
-40 to +85	-40 to +85

FREQUENCY CHARACTERISTICS

2.4GHz WLAN BAND



5.5GHz WLAN BAND

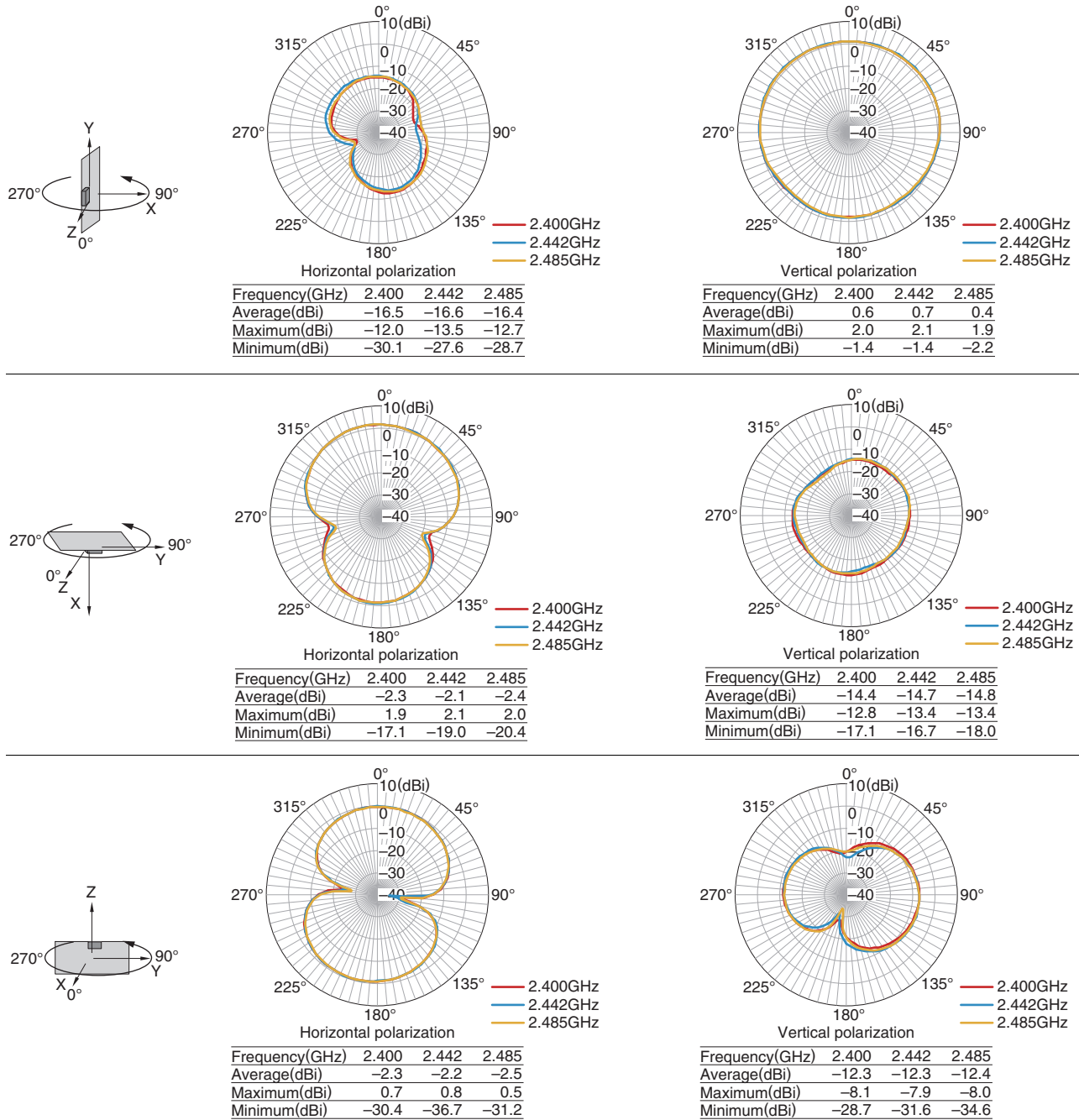


• Tested antenna has been soldered. Evaluation board size is 50x20x1 mm.

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RADIATION PATTERNS

2.4GHz ISM BAND



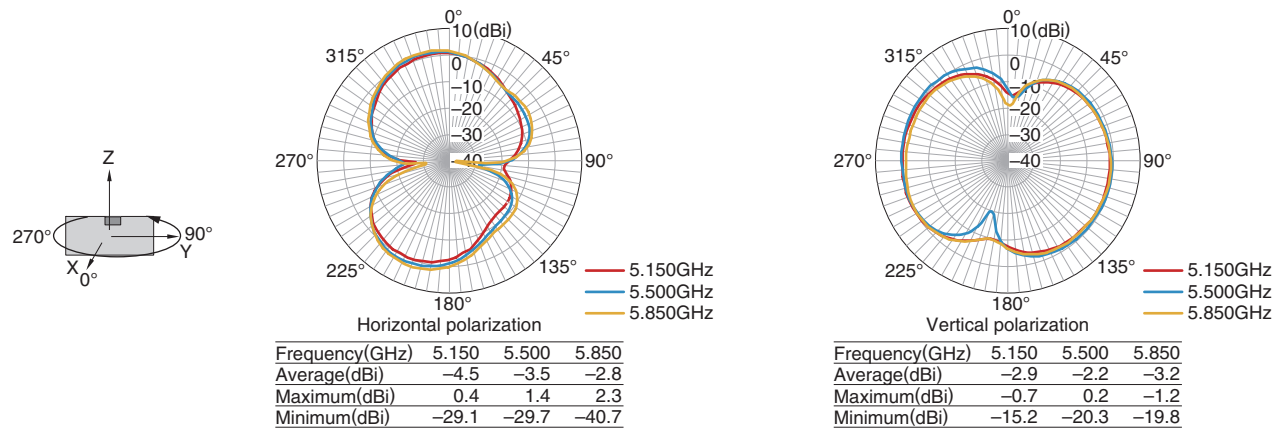
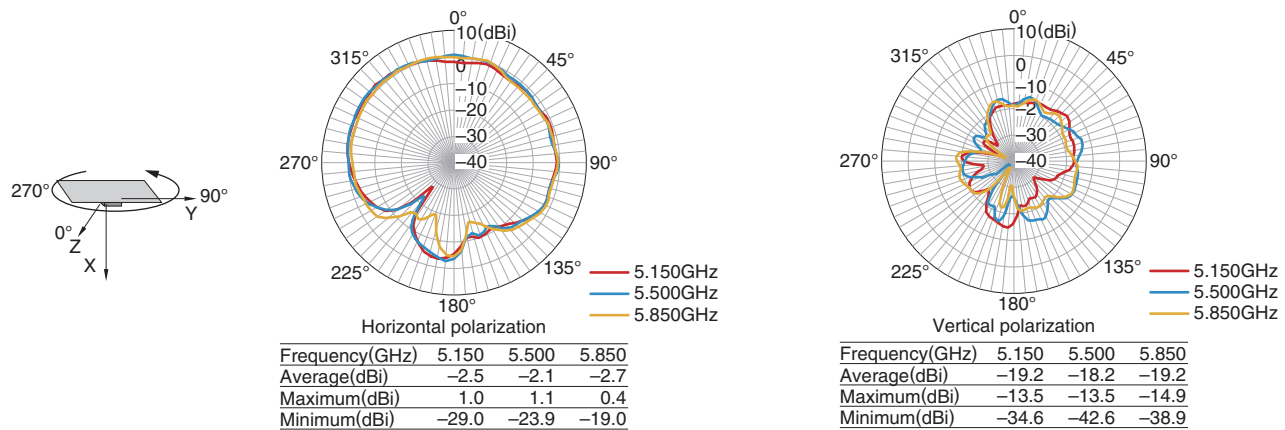
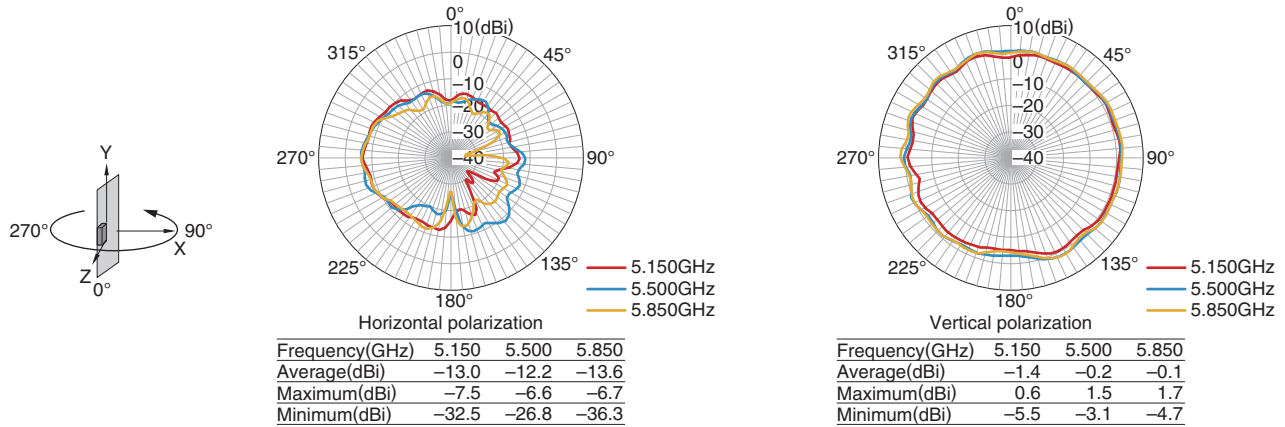
• Tested antenna has been soldered. Evaluation board size is 50x20x1 mm.

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RADIATION PATTERNS

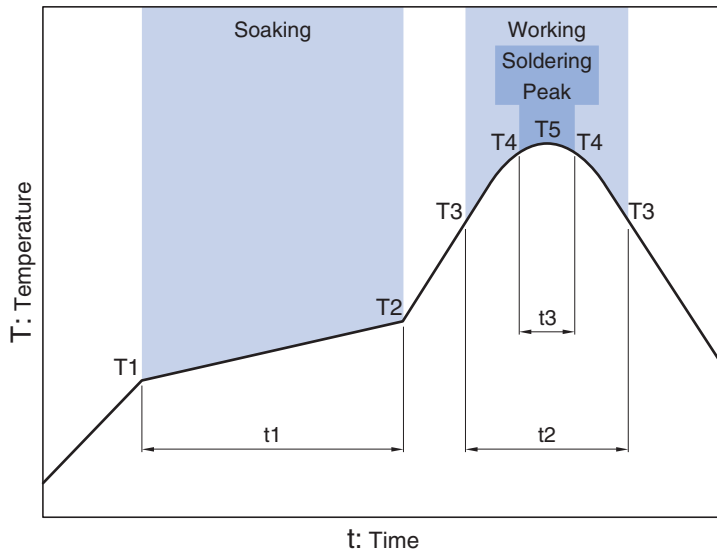
5.5GHZ BAND



•Tested antenna has been soldered. Evaluation board size is 50x20x1 mm.

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RECOMMENDED REFLOW PROFILE


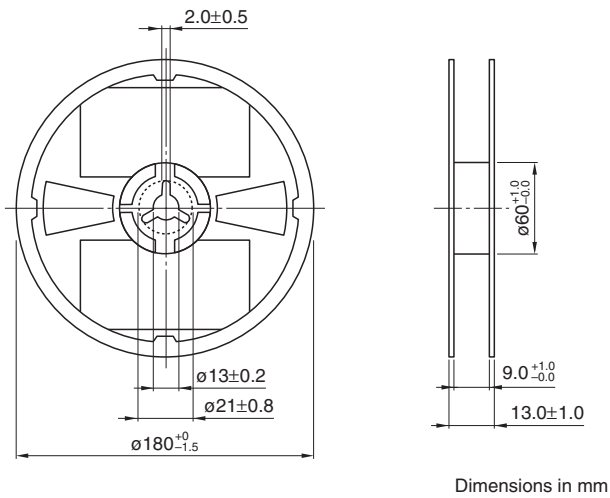
Soaking			Working		Soldering Peak		
Temp.	T2	Time	Temp.	Time	Temp.	Time	Temp.
T1	T2	t1	T3	t2	T4	t3	T5
150°C	180°C	60 to 120s	230°C	30 to 60s	247 to 253°C	within 10s	260°C max.

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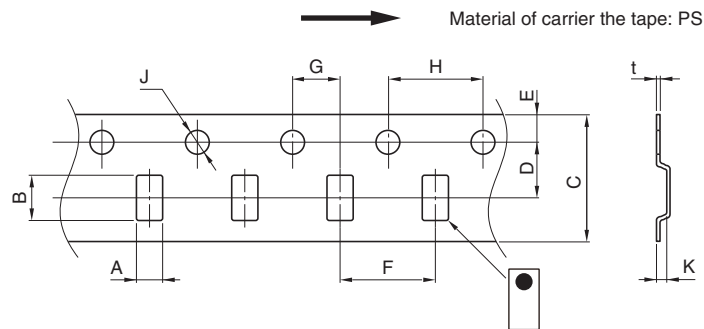
ANT162442DT-2001A2

PACKAGING STYLE

REEL DIMENSIONS



TAPE DIMENSIONS



Dimensions in mm

A	B	C	D	E	F	G	H	J	K	t
0.97 ± 0.05	1.8 ± 0.05	8.0 ± 0.2	3.5 ± 0.05	1.75 ± 0.1	4.0 ± 0.1	2.0 ± 0.05	4.0 ± 0.1	$1.5 + 0.1 / - 0$	0.55max.	0.25 ± 0.05

PACKAGE QUANTITY

Standard package quantity (pieces/reel)
4,000

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REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using these products.

REMINDERS

The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.

The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.

Please understand that we are not responsible for any damage or liability caused by use of the products in any of the applications below or for any other use exceeding the range or conditions set forth in this catalog.

- | | |
|---|--|
| (1) Aerospace/Aviation equipment | (8) Public information-processing equipment |
| (2) Transportation equipment (cars, electric trains, ships, etc.) | (9) Military equipment |
| (3) Medical equipment | (10) Electric heating apparatus, burning equipment |
| (4) Power-generation control equipment | (11) Disaster prevention/crime prevention equipment |
| (5) Atomic energy-related equipment | (12) Safety equipment |
| (6) Seabed equipment | (13) Other applications that are not considered general-purpose applications |
| (7) Transportation control equipment | |

When using this product in general-purpose applications, you are kindly requested to take into consideration securing protection circuit/equipment or providing backup circuits, etc., to ensure higher safety.