



# Circulator

SMD

# CU4S0506 Series

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**5x5mm\***

\* Dimensions Code JIS

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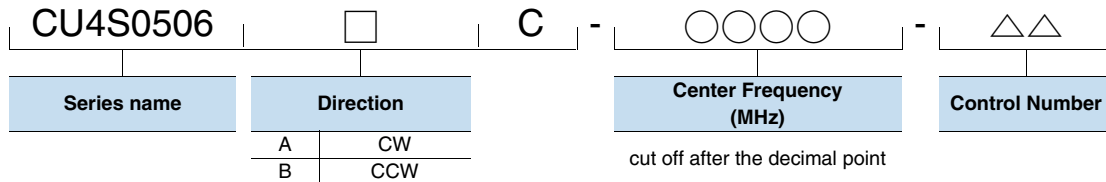
# Circulator

## SMD

Product compatible with RoHS directive

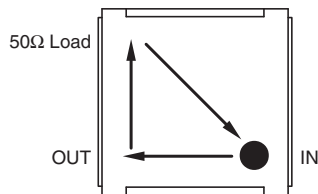
# Overview of CU4S0506 Series

## PART NUMBER CONSTRUCTION

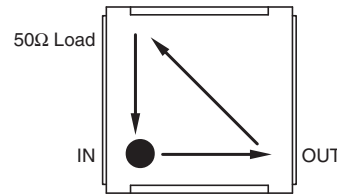


## DIRECTION OF CIRCULATION

**ClockWise(CW): A**



**CounterClockWise(CCW): B**



## TEMPERATURE RANGE

Operating temperature (°C)	Storage temperature (°C)
-40 to +105	-40 to +105

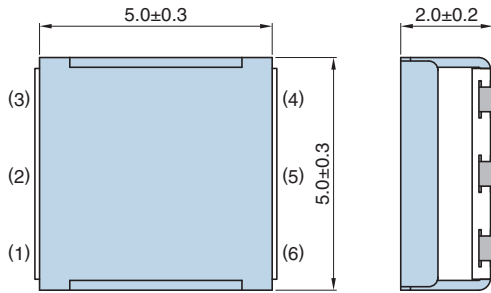
RoHS Directive Compliant Product: See the following for more details related to RoHS Directive compliant products. <http://product.tdk.com/en/environment/rohs/>

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

# CU4S0506 Series

## SHAPES AND DIMENSIONS

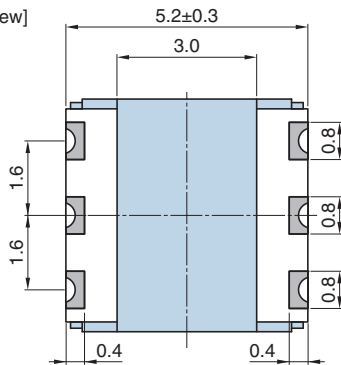
[Top view]



■ Terminal (Au plating)  
 ■ Metal parts other than a terminal. (GND electric potential)

Tolerance unless otherwise specified:  $\pm 0.2$   
 Coplanarity : 0.1max.

[Bottom view]



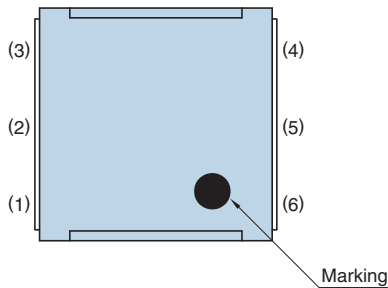
Terminal functions

1	OUT	IN
2	GROUND	GROUND
3	50Ω Load	50Ω Load
4	GROUND	GROUND
5	GROUND	GROUND
6	IN	OUT
Rotation	Clockwise	Counter Clockwise

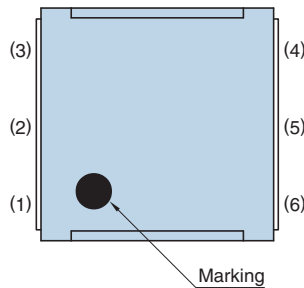
Dimensions in mm

[Marking]

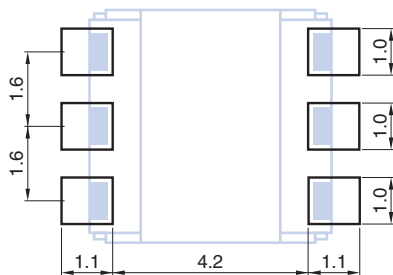
ClockWise(CW): A



CounterClockWise(CCW): B

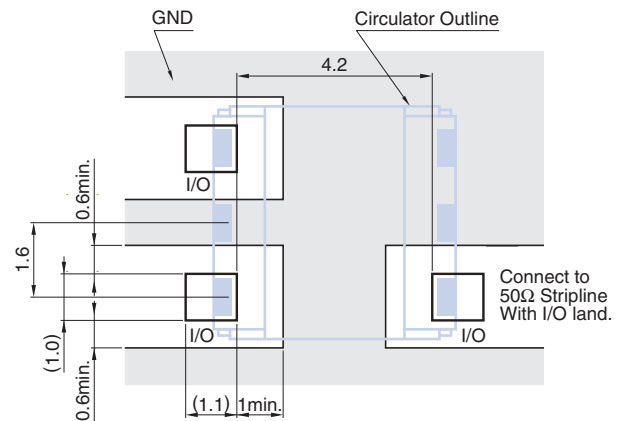


## RECOMMENDED LAND PATTERN



Dimensions in mm

## RECOMMENDED PC BOARD PATTERN



Dimensions in mm

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# CU4S0506 Series

## ELECTRICAL CHARACTERISTICS

Frequency range (MHz)	Center frequency (MHz)	Isolation (dB) min.	Insertion loss (dB) max.	V.S.W.R. Zo=50Ω max.	Handling power (W) max.	Part Number	
						ClockWise	CounterClockWise
869 to 894	881.5	11	1.05	1.8	5	CU4S0506AC-881-00	CU4S0506BC-881-00
925 to 960	942.5	11	1.05	1.8	5	CU4S0506AC-942-00	CU4S0506BC-942-00
1805 to 1880	1842.5	12	0.85	1.7	5	CU4S0506AC-1842-00	CU4S0506BC-1842-00
1880 to 1920	1900	14	0.80	1.6	5	CU4S0506AC-1900-00	CU4S0506BC-1900-00
2110 to 2170	2140	14	0.80	1.6	5	CU4S0506AC-2140-00	CU4S0506BC-2140-00
2300 to 2400	2350	12	0.85	1.7	5	CU4S0506AC-2350-00	CU4S0506BC-2350-00
2496 to 2690	2593	11	0.90	1.7	5	CU4S0506AC-2593-00	CU4S0506BC-2593-00
2570 to 2620	2595	12	0.85	1.6	5	CU4S0506AC-2595-00	CU4S0506BC-2595-00

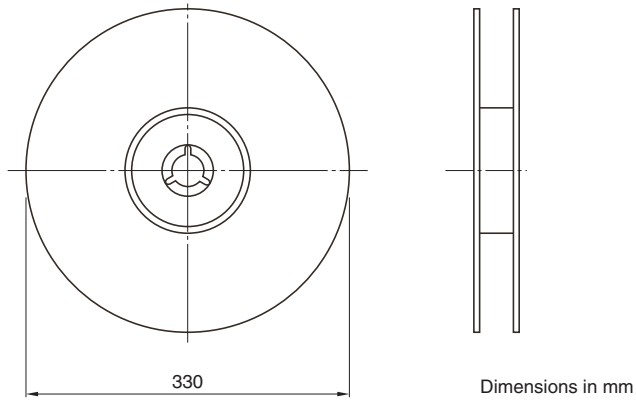
Characteristic Impedance ( $\Omega$ ) : 50(Nominal)

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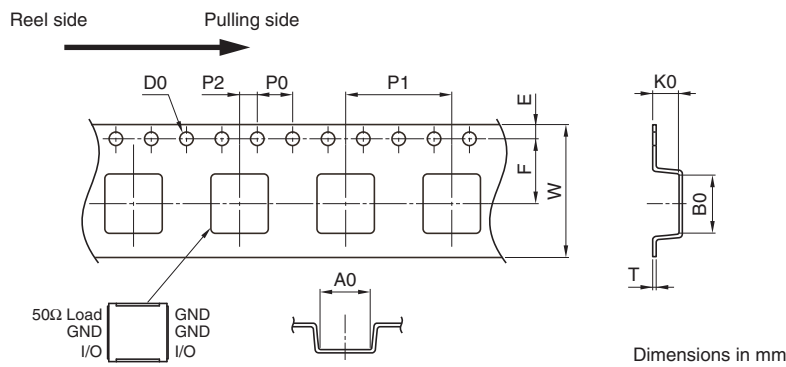
# CU4S0506 Series

## PACKAGING STYLE

### REEL DIMENSIONS



### TAPE DIMENSIONS



A0	B0	D0	E	F	P0	P1	P2	W	K0	T
5.6±0.1	5.6±0.1	1.5+0.1/-0	1.75±0.1	7.5±0.1	4.0±0.1	12.0±0.1	2.0±0.1	16.0+0.3/-0.1	2.6±0.1	0.3±0.05

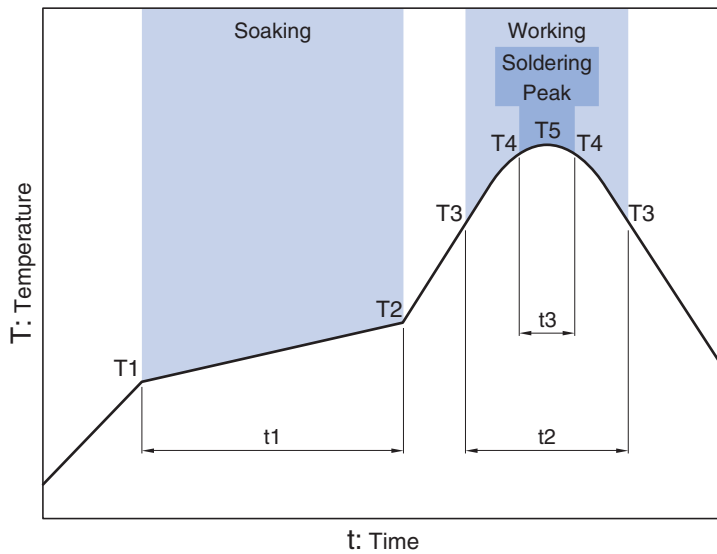
## PACKAGE QUANTITY

Standard package quantity (pieces/reel)
1000

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# CU4S0506 Series

## 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	250°C	within 10s	260°C max.

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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

Please do not bring the magnet close to the product (Recommending is separating to 50cm or more). An electric characteristic might be deteriorated.

The magnetic field of 5mT or more must not go into the product when you make the magnet approach.

Moreover, please do not touch a soft magnetic material such as iron (Recommending is separating to 10mm or more). An electric characteristic might be deteriorated. An electric characteristic changes when bringing it close within 10mm(reversible change).

There is a leakage of some magnetism (0.3T or less) from the product.

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.