



Circulator

SMD

CU1S1281 Series

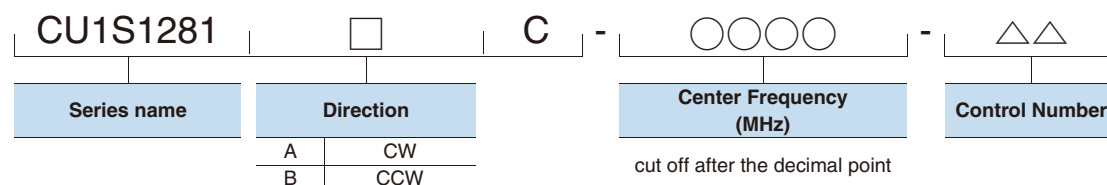
Circulator

SMD

Product compatible with RoHS directive

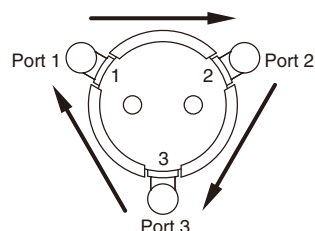
Overview of CU1S1281 Series

PART NUMBER CONSTRUCTION

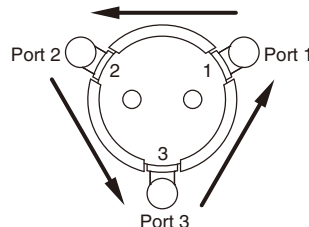


DIRECTION OF CIRCULATION

ClockWise(CW): A



CounterClockWise(CCW): B



TEMPERATURE RANGE

Operating temperature (°C)	Storage temperature (°C)
-35 to +85	-40 to +85

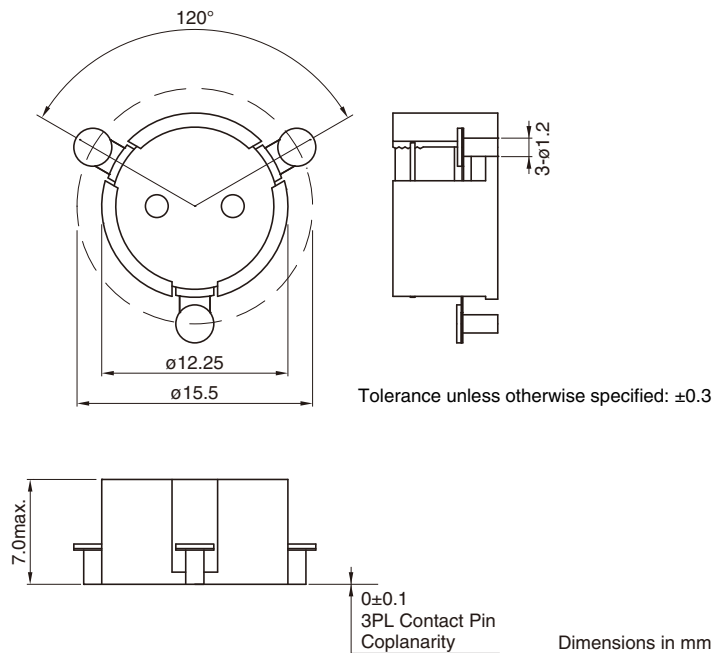
○ RoHS Directive Compliant Product: See the following for more details related to RoHS Directive compliant products. <http://product.tdk.com/en/environment/rohs/>

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

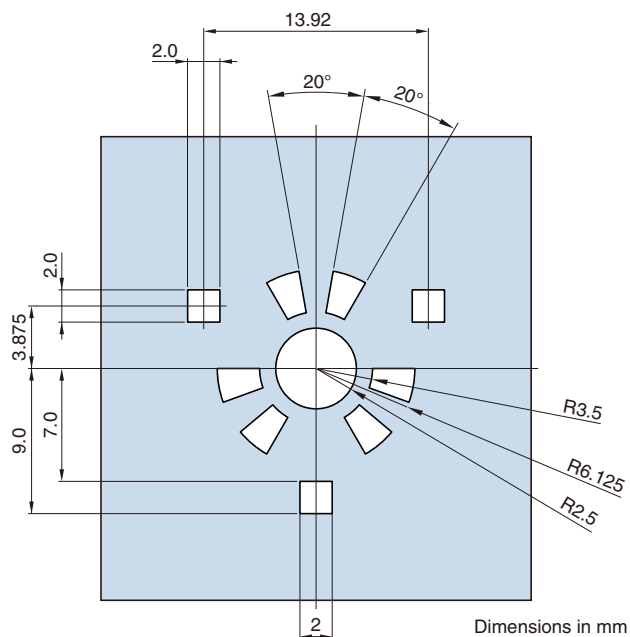
CU1S1281 Series

SHAPES AND DIMENSIONS

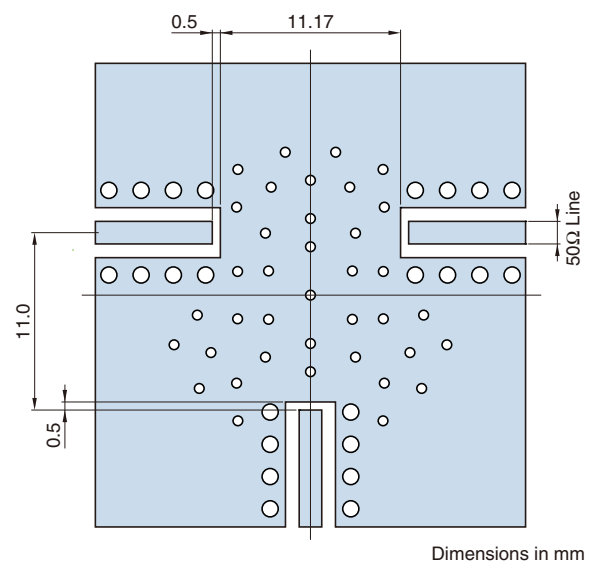
[Top view]



RECOMMENDED LAND PATTERN



RECOMMENDED PC BOARD PATTERN



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CU1S1281 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.	IMD 10Wx2tone (dBc) max.	Part Number	
							ClockWise	CounterClockWise
1805 to 1880	1842.5	20	0.3	1.22	20	-60	CU1S1281AC-1842-00	CU1S1281BC-1842-00
1844.9 to 1879.9	1862.4	20	0.3	1.22	20	-60	CU1S1281AC-1862-00	CU1S1281BC-1862-00
1880 to 1920	1900	21	0.3	1.20	20	-60	CU1S1281AC-1900-00	CU1S1281BC-1900-00
1930 to 1990	1960	20	0.3	1.22	20	-60	CU1S1281AC-1960-00	CU1S1281BC-1960-00
1930 to 1995	1962.5	18	0.3	1.25	20	-60	CU1S1281AC-1962-00	CU1S1281BC-1962-00
2010 to 2025	2017.5	21	0.3	1.20	20	-60	CU1S1281AC-2017-00	CU1S1281BC-2017-00
2110 to 2170	2140	20	0.3	1.22	20	-60	CU1S1281AC-2140-00	CU1S1281BC-2140-00
2300 to 2400	2350	23	0.3	1.15	20	-60	CU1S1281AC-2350-00	CU1S1281BC-2350-00
2350 to 2360	2355	23	0.3	1.15	20	-60	CU1S1281AC-2355-00	CU1S1281BC-2355-00
2496 to 2690	2593	18	0.3	1.25	20	-60	CU1S1281AC-2593-00	CU1S1281BC-2593-00
2570 to 2620	2595	23	0.3	1.15	20	-60	CU1S1281AC-2595-00	CU1S1281BC-2595-00
2620 to 2690	2655	21	0.3	1.20	20	-60	CU1S1281AC-2655-00	CU1S1281BC-2655-00
3400 to 3600	3500	20	0.3	1.22	20	-60	CU1S1281AC-3500-00	CU1S1281BC-3500-00
3480 to 3600	3540	20	0.3	1.22	20	-60	CU1S1281AC-3540-00	CU1S1281BC-3540-00
3600 to 3800	3700	18	0.3	1.25	20	-60	CU1S1281AC-3700-00	CU1S1281BC-3700-00

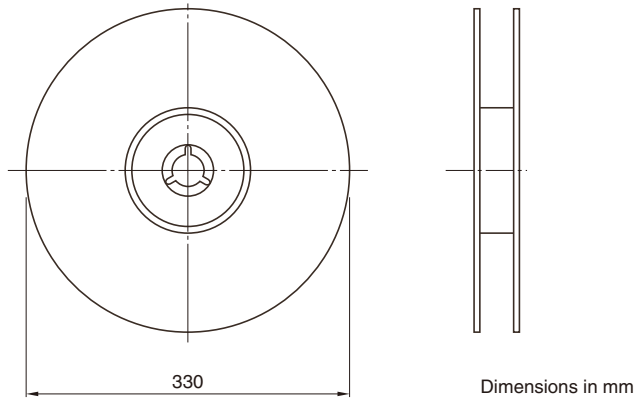
Characteristic Impedance (Ω) : 50(Nominal)

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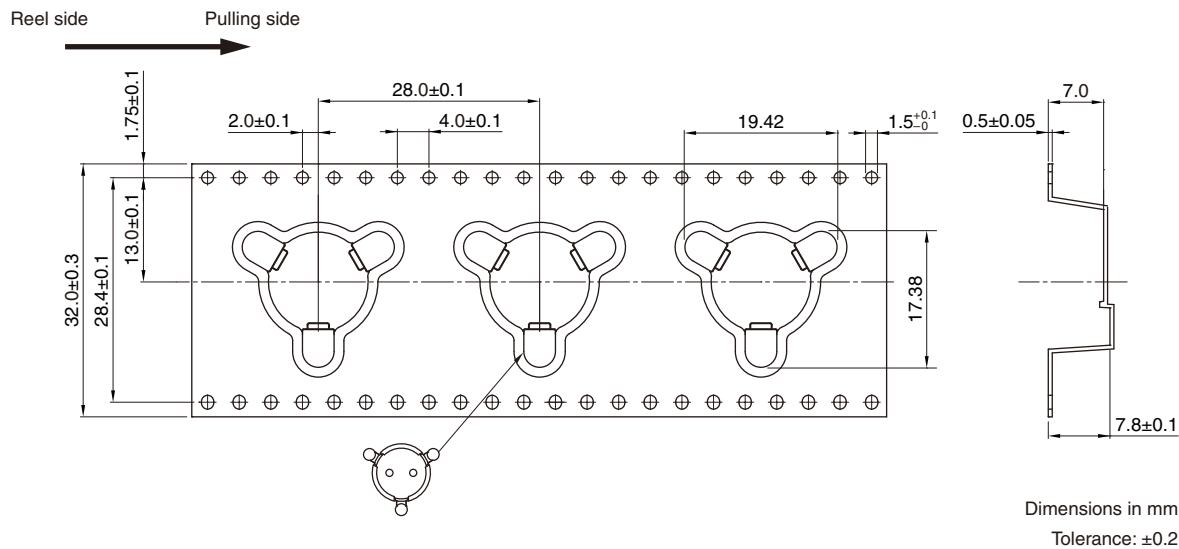
CU1S1281 Series

PACKAGING STYLE

REEL DIMENSIONS



TAPE DIMENSIONS



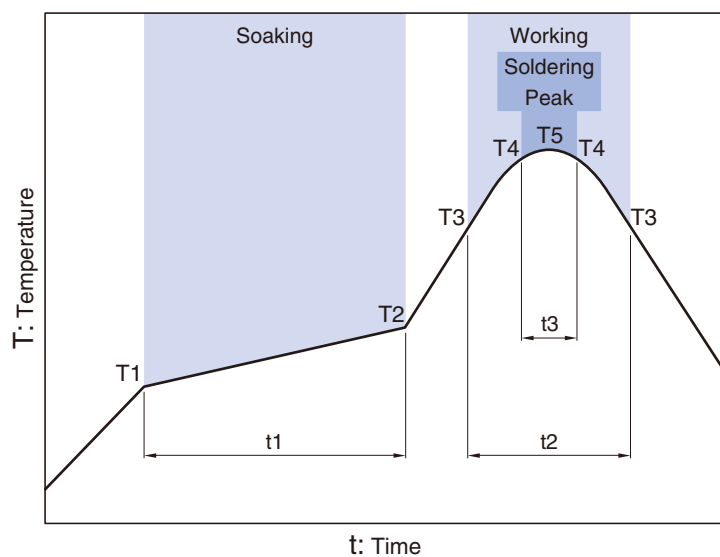
PACKAGE QUANTITY

Standard package quantity
(pieces/reel)
200

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CU1S1281 Series

RECOMMENDED REFLOW PROFILE



Soaking			Working		Soldering Peak		
Temp.		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.