



# Induced Lightning Surge Protector

R5K SERIES

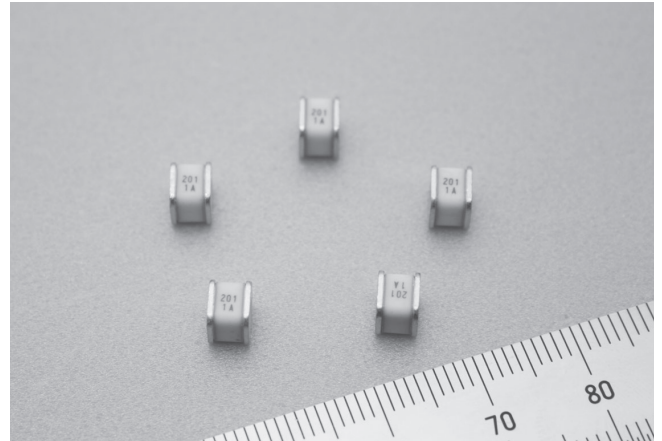


## Features

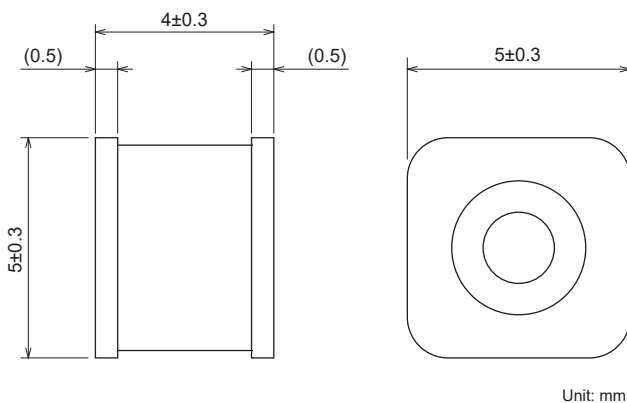
- Small surface mount type corresponding to reflow solder
- High impulse current capacity 8/20 $\mu$ s-5,000A
- Excellent insulation resistance and small capacitance 1.0pF max.
- Recommendation of ITU-T conformity

## Applications

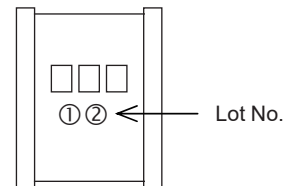
- Homegateway equipments
- Telephone, PBX, Wireless base station
- Optical transmission equipments
- CATV transmission equipments, BS / CS broadcasts equipments
- Fire alarm systems and home security systems



## Dimensions



## Description of marking



□□□..... DC Breakdown Voltage  
eg.) R5K-231P45U→231

[Lot No.] ①..... Identification of manufacture year  
eg.) 2023→3

②..... Manufacture month (see below)

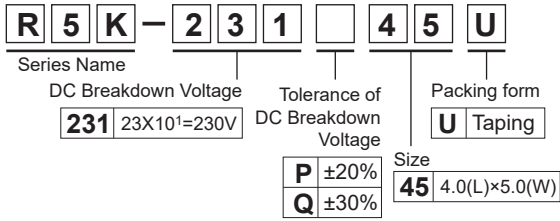
Month	1	2	3	4	5	6	7	8	9	10	11	12
Symbol	A	B	D	E	F	G	H	J	K	L	M	N

## Electrical Specifications

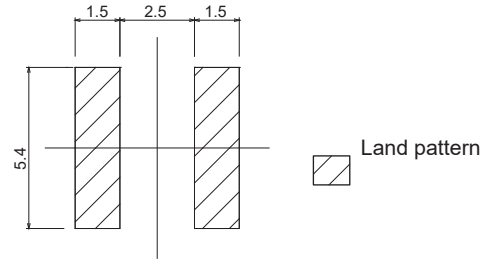
Model Number*1	DC Breakdown Voltage (V)	Insulation Resistance (M $\Omega$ ) min.	Capacitance 1MHz (pF) max.	Impulse Life Test	Impulse Current Capacity*2	Impulse Withstanding Voltage Capacity
R5K-750□45U	75	1,000(DC50V)	1.0	8/20 $\mu$ s, 100A 300 times	8/20 $\mu$ s, 5,000A (R=2 $\Omega$ ) Positive/Negative 5 times	10/700 $\mu$ s 15,000V (R=25 $\Omega$ ) Positive/Negative 5times
R5K-900□45U	90					
R5K-231□45U	230					
R5K-251□45U	250					
R5K-351□45U	350					
R5K-421□45U	420					
R5K-501□45U	500					
R5K-601□45U	600					

\*1 □: Tolerance  $\pm$ 20%=P, Tolerance  $\pm$ 30%=Q \*2 Comforms to ITU-T K.20, K.21 Enhanced test  
Operating Temperature: -20~+80°C

● Model numbering system



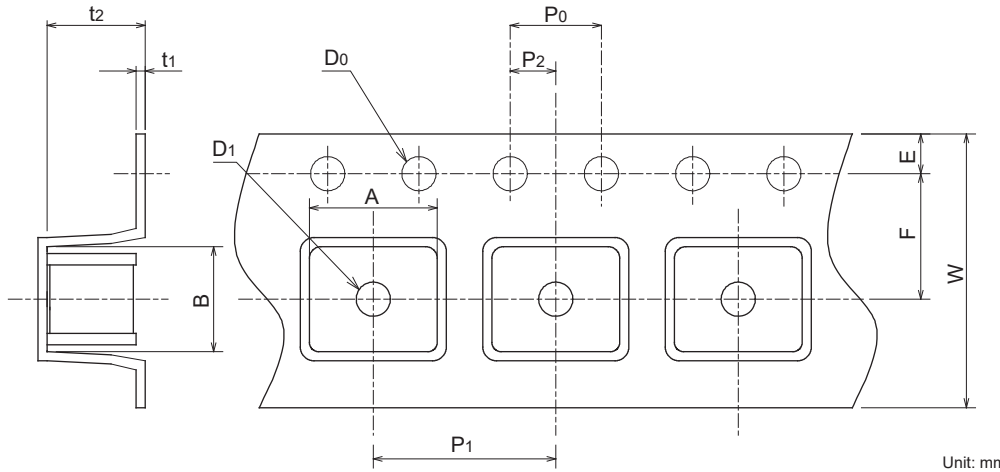
● Recommended Land Pattern (Typical value)



Recommended thickness of copper foil is 70μm for upgrading of withstand surge current.

Unit: mm

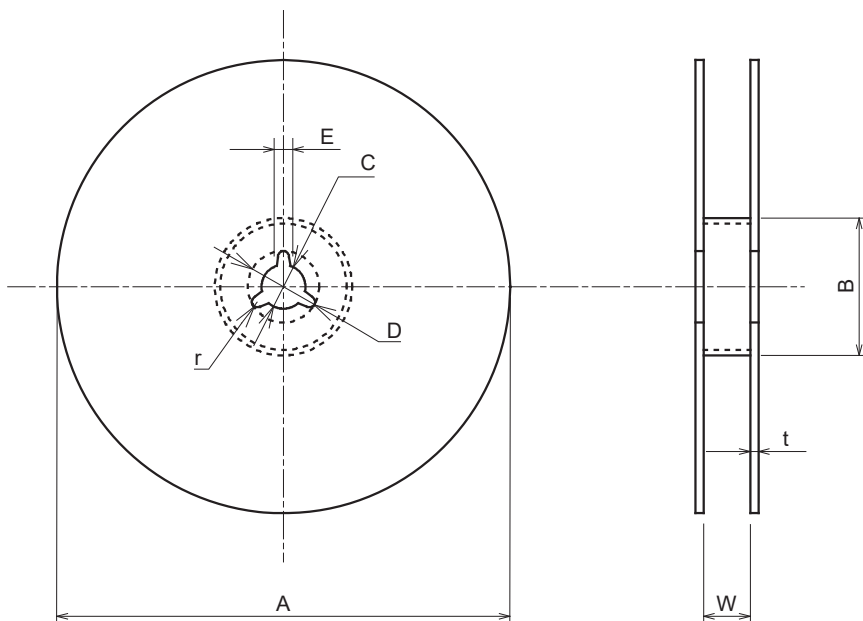
● Taping Dimensions



Dimensions (mm)	
A	5.6±0.3
B	4.6±0.3
W	12.0±0.4
F	5.5±0.2
E	1.75±0.2
P <sub>1</sub>	8.0±0.2
P <sub>2</sub>	2.0±0.2
P <sub>0</sub>	4.0±0.2
D <sub>0</sub>	φ 1.5±0.1
D <sub>1</sub>	φ 1.5 min.
t <sub>1</sub>	0.35±0.2
t <sub>2</sub>	5.35±0.2

Unit: mm

● Reel Dimensions (2,000pcs per one reel)



Dimensions (mm)	
A	φ 380±3
B	φ 80±2
C	φ 13.0±0.5
D	φ 21±1
E	2±1
W	13.5±2.0
t	2.0±0.5
r	1.0±0.2

Unit: mm