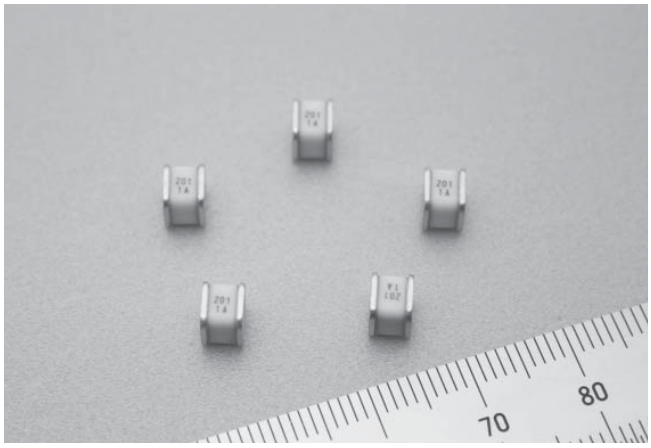
Features

- Small surface mount type corresponding to reflow solder
- High impulse current capacity 8/20μs-5,000A
- Quick response for surge
- Excellent insulation resistance and small capacitance 1.0pF max.
- Recommendation of ITU-T conformity

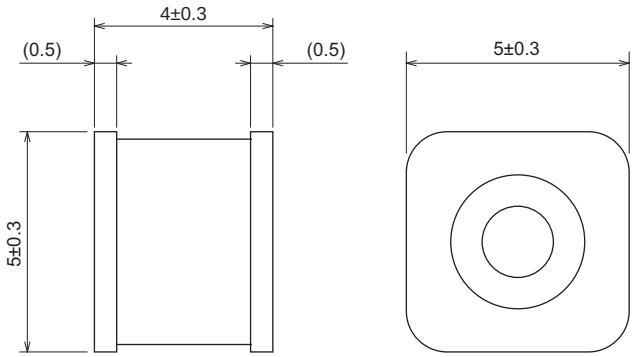


Applications

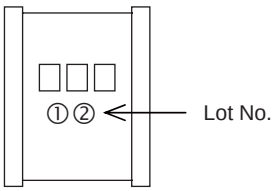
- Homegateway equipments
- Telephone, PBX, Wireless base station
- Optical transmission equipments
- CATV transmission equipments, BS / CS broadcasts equipments
- Fire alarm systems and Home security systems

- *Description of marking*

- *Dimensions*



Unit: mm



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

[Lot No.] ①···· Identification of manufacture year
eg.) 2016→6
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 (MΩ) 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	8/20μs, 100A 300 times	8/20μs, 5,000A (R=2Ω) Positive/Negative 5 times	10/700μs 15,000V (R=25Ω) Positive/Negative 5times
R5K-900□45U	90					
R5K-231□45U	230	1,000(DC100V)				
R5K-251□45U	250					
R5K-351□45U	350					
R5K-421□45U	420					
R5K-501□45U	500					
R5K-601□45U	600					

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

● Model numbering system

R 5 K – 2 3 1 ☐ 4 5 U

Series Name

DC Breakdown Voltage

231	23X10¹=230V

Tolerance of DC Breakdown Voltage

P	±20%
Q	±30%

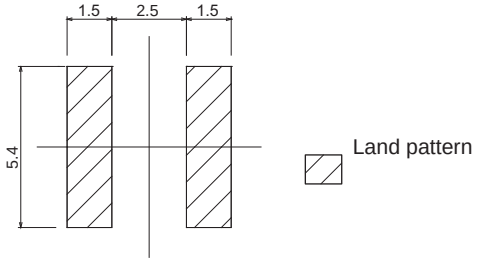
Size

45	4.0(L)×5.0(W)

Packing form

U	Taping

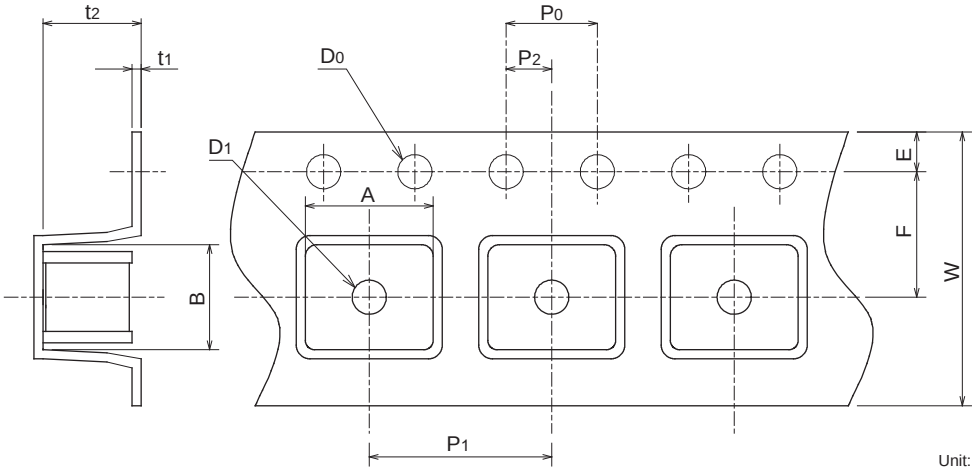
● *Recommended Land Pattern (Typical value)*



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

Unit: mm

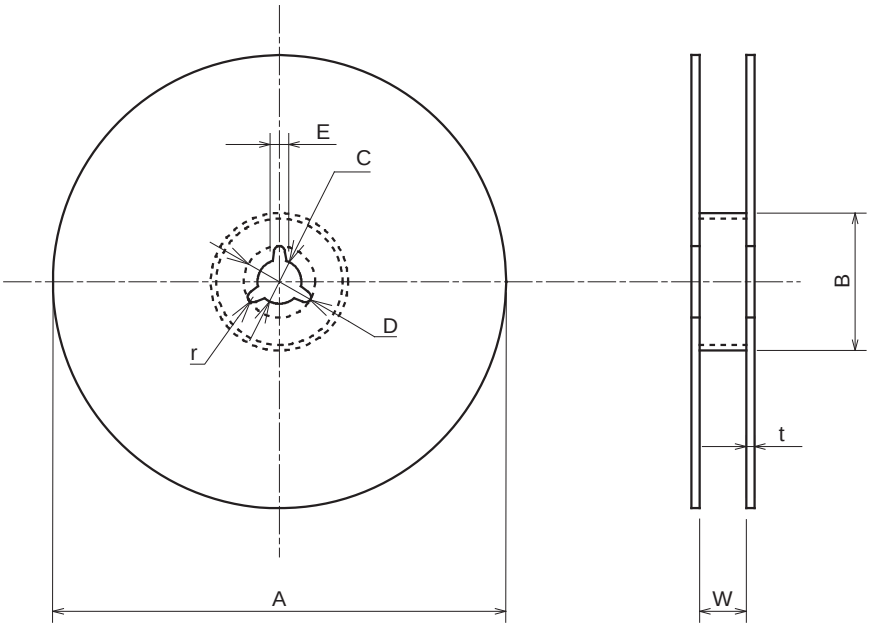
● *Taping Dimensions*



Unit: mm

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_1	8.0±0.2
P_2	2.0±0.2
P_0	4.0±0.2
D_0	φ 1.5±0.1
D_1	φ 1.5 min.
t_1	0.35±0.2
t_2	5.35±0.2

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



Unit: mm

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