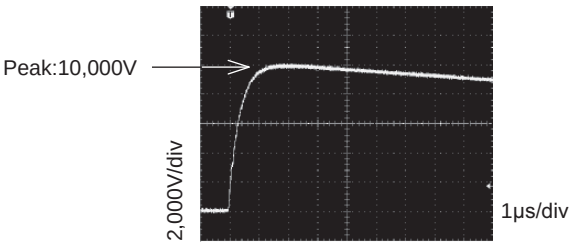
RHCA5039 series is suitable for products that need DC insulation resistance test on Line-FG, SG of a communications / signal line. Impulse current capacity is 2,000A 8/20μs.

Features

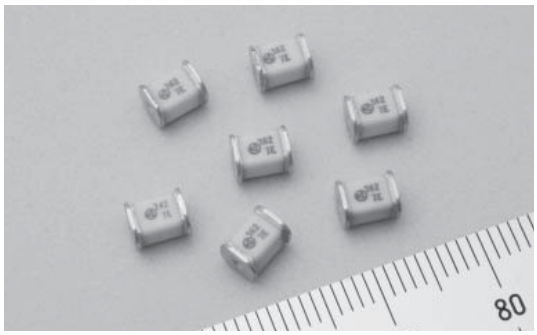
- Chip surge absorber for protection from indirect lighting surge, adaptable to high density surface mount technology
- Impulse current capacity 2,000A 8/20μs
- Small electrostatic capacity(Maximum 0.6pF)

- *Impulse Absorption Characteristics*

Impulse waveform 1.2/50μs-10,000V

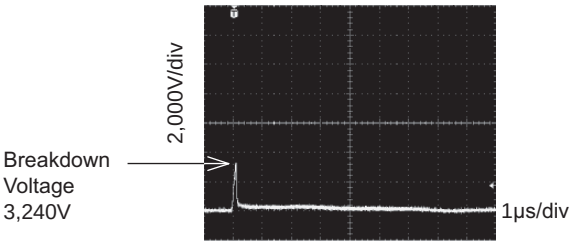


Safety Standard		File No.
UL	:UL1449 4th.	E322107
cUL	:C22.2 No.8-13	
UL-EU	:EN61643-311 :IEC61643-311	



RHCA-242H53U

Impulse waveform



Electrical Specifications

●RHCA53 series

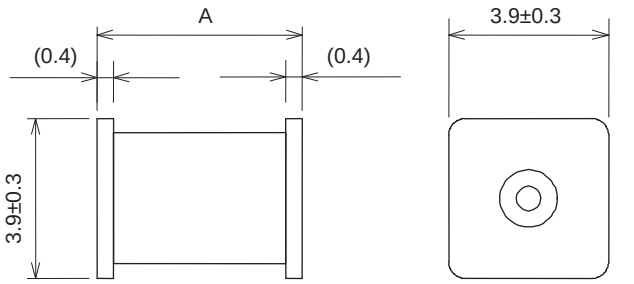
Safety Standard		Model Number	Impulse Sparkover Voltage 1.2/50μs (V) max.		Withstanding Voltage 50/60Hz	Insulation Resistance (MΩ) Min.	Capacitance 1MHz (pF) Max.	Impulse Life Test	Impulse Current Capacity	DC Breakdown Voltage (V)
UL1449 cUL	UL-EU		Applied Voltage	Specification						
○*1	○	RHCA-242H53U	5,000V	4,500V max.	AC1,000V-60sec AC1,200V-3sec	1,000(DC500V)	0.6	8/20μs 100A 300 times	8/20μs 2,000A	2,400±20% *3
○*1*2	○	RHCA-302H53U		4,700V max.	AC1,500V-60sec					3,000±20% *3
○*1*2	○	RHCA-362H53U		4,950V max.	AC1,500V-60sec AC1,800V-3sec					3,600±20% *3

●RHCA53(335) series

Safety Standard		Model Number	Impulse Sparkover Voltage 1.2/50μs (V) max.		Withstanding Voltage 50/60Hz	Insulation Resistance (MΩ) Min.	Capacitance 1MHz (pF) Max.	Impulse Life Test	Impulse Current Capacity	DC Breakdown Voltage (V)
UL1449 cUL	UL-EU		Applied Voltage	Specification						
○*1*2	○	RHCA-102P53U(335)	-	-	-	1,000(DC500V)	0.6	8/20μs 100A 300 times	8/20μs 3,500A	1,000±20%
○*1*2	○	RHCA-102Q53U(335)								1,000±30%
○*1	○	RHCA-202H53U(335)	5,000V	4,500V max.	AC1,000V 60s					2,000±20% *3
○*1	○	RHCA-242H53U(335)			AC1,000V 60s AC1,200V 3s					2,400±20% *3
○*1	○	RHCA-272H53U(335)			AC1,200V 60s					2,700±20% *3
○*1*2	○	RHCA-302H53U(335)		4,700V max.	AC1,500V 60s					3,000±20% *3
○*1*2	○	RHCA-362H53U(335)		4,950V max.	AC1,500V 60s AC1,800V 3s					3,600±20% *3
○*1*2	○	RHCA-402H53U(335)	7,500V	7,450V max.	AC2,000V 60s					4,000±20% *3
○*1*2	○	RHCA-452H53U(335)	8,000V	7,950V max.	AC2,000V 60s	1,000(DC1,000V)				4,500±20% *3

*1 Rated voltage AC125V: Approved if it is connected to UL approved varistor (V1.0mA≥270V, D≥φ 7mm).
*2 Rated voltage AC250V: Approved if it is connected to UL approved varistor (V1.0mA≥470V, D≥φ 7mm).
*3 Reference Value
Operating Temperature: -20~+80°C

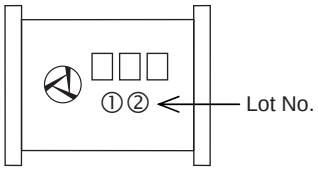
● *Dimensions*



Model Number	A
RHCA53	5.0±0.3
RHCA53(335)	5.6±0.3

Unit: mm

● *Description of marking*

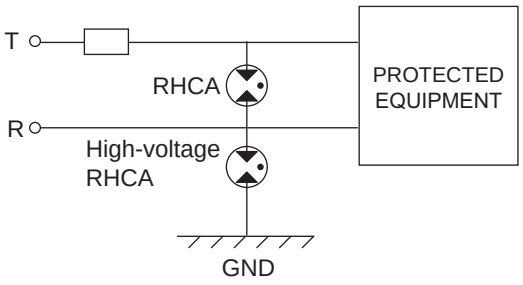


□□□····· DC Breakdown Voltage
eg.) RHCA-362H53U→362

[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

● *Example (Communication Line)*



● Model numbering system

R H C A – 2 4 2 H 5 3 U

Series Name

DC Breakdown Voltage

242	24X10²=2,400V

Tolerance of DC Breakdown Voltage

102	**P**	±20%
	Q	±30%
202,242,272,302 362,402,452	**H**	±20%

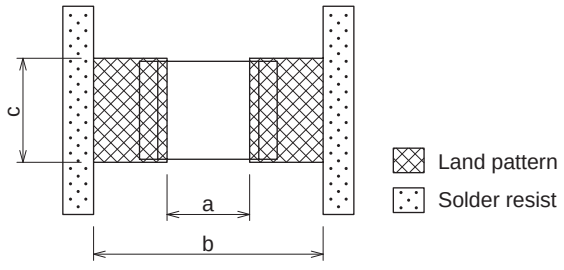
Size

Packing form

U	Taping

● *Recommended Land Pattern (Typical value)*

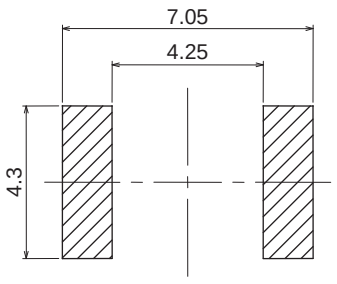
RHCA53 Series



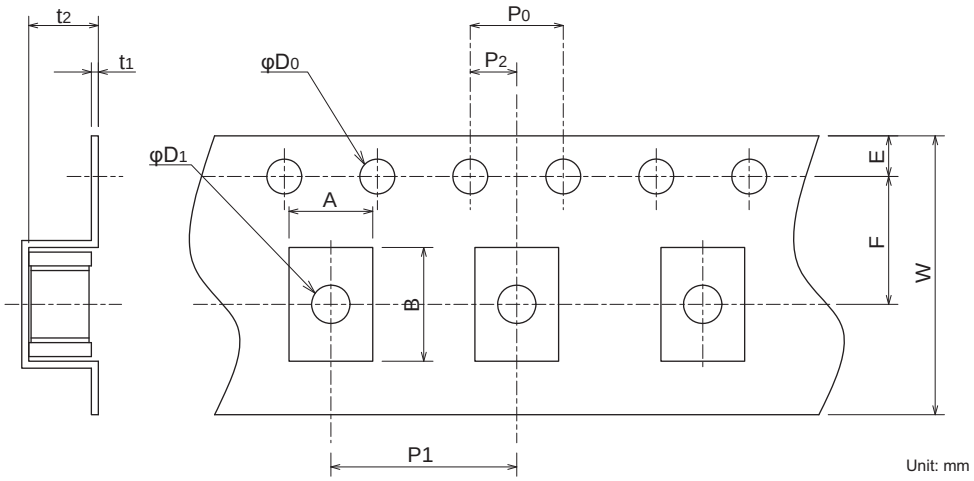
Unit: mm

	Dimensions (mm)		
	a	b	c
Reflow Soldering	3.7	6.5	4.3

RHCA53(335) Series



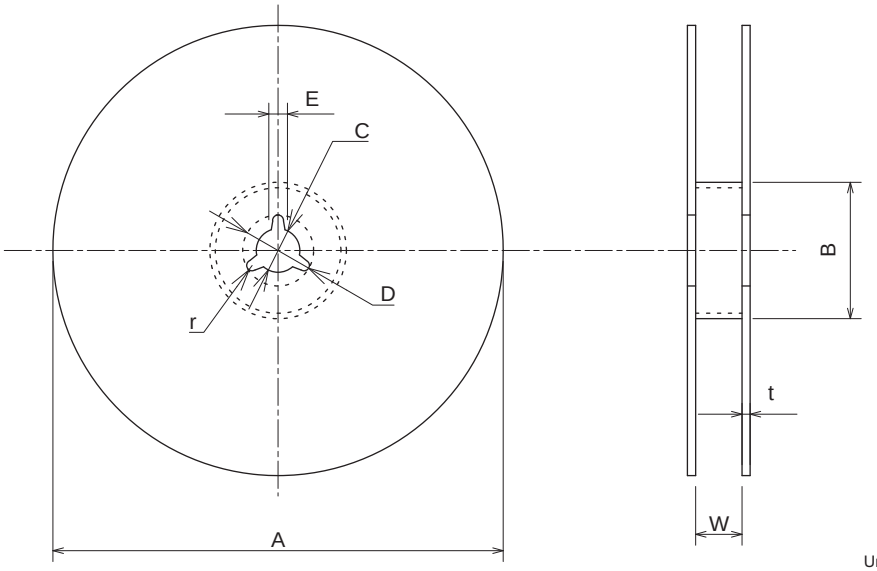
● *Taping Dimensions*



Unit: mm

Dimensions (mm)	
A	4.5±0.3
B	5.6±0.3
W	12.0±0.3
F	5.5±0.1
E	1.75±0.1
P_1	8.0±0.1
P_2	2.0±0.1
P_0	4.0±0.1
D_0	φ 1.55±0.1
D_1	φ 1.5 min.
t_1	0.40±0.2
t_2	4.3±0.2

● *Reel Dimensions (2,500pcs 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