



● RA-V7-Y/Y(5) series

RA-V7-Y/Y(5) series is a radial type surge absorber for high voltage and is suitable for insulation testing.

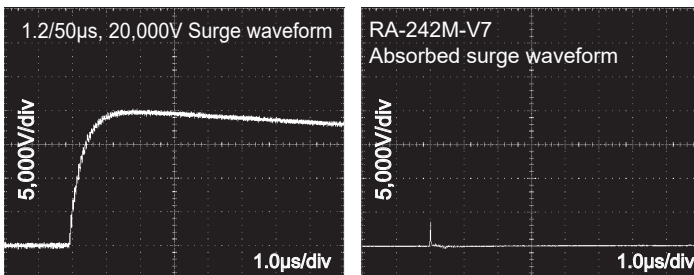
Features

- Supports insulation withstand voltage testing
- High speed response
- Lineup from 500 to 4,500V
- UL, cUL, and TÜV certified

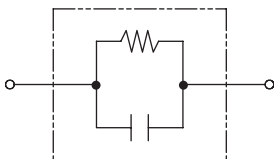
Applications

- Switching power supplies, inverters
- Refrigerators, washing machines, air conditioners
- LED lighting
- Photocopiers and telecommunications equipment
- Flat panel displays (FPDs)
- BD/DVD recorders
- Antenna amplifiers (boosters)

● Impulse Absorption Characteristics

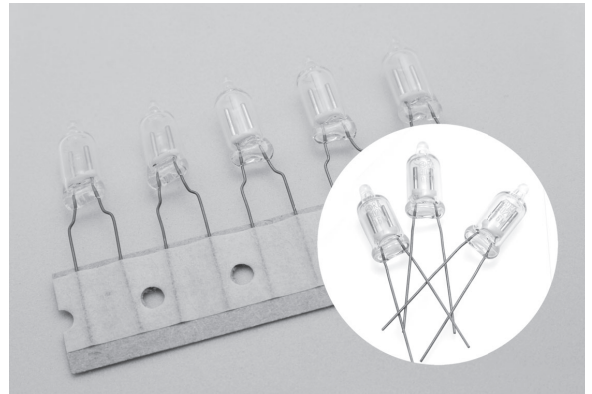


● Circuit

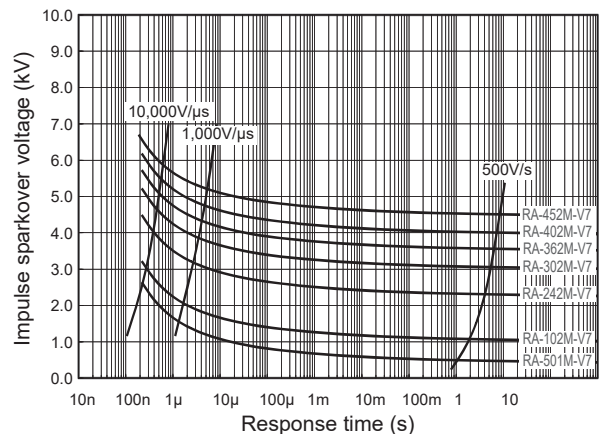


Safety Standard		File No.
UL	:UL1449	E322107
cUL	:C22.2 No.269.5	
TÜV	:EN62368-1	J50114145

* File No. may be revised without notice. Please contact us at the time of your request for certifications.



● V-t Characteristics

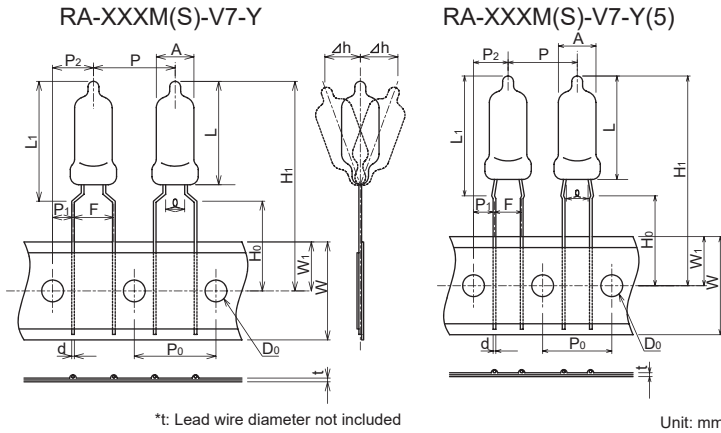


Electrical Specifications

Model Number	DC Breakdown Voltage (V)	Impulse Sparkover Voltage 1.2/50µs		Insulation Resistance (MΩ) min.	Capacitance 1MHz (pF) max.	Impulse Life test 8/20µs 100A	Impulse Current Capacity 8/20µs (A)	Withstanding Voltage
		Applied Voltage	Specification					
RA-501M/MS-V7-Y/Y(5)	500 (400~600)	5,000V	5,000V max.	1,000(DC100V)	2.0	300	3,500	-
RA-601M/MS-V7-Y/Y(5)	600 (480~720)			1,000(DC250V)				-
RA-102M/MS-V7-Y/Y(5)	1,000 (800~1,200)			-				-
RA-152M/MS-V7-Y/Y(5)	1,500 (1,200~1,800)			-				-
RA-242M/MS-V7-Y/Y(5)	2,400 (1,920~2,880)*			1,000(DC500V)				AC1,250V 3s
RA-302M/MS-V7-Y/Y(5)	3,000 (2,400~3,600)*			AC1,500V 60s				
RA-362M/MS-V7-Y/Y(5)	3,600 (2,880~4,320)*			AC1,800V 3s				
RA-402M/MS-V7-Y/Y(5)	4,000 (3,200~4,800)*	7,500V	7,500V max.	AC2,000V 60s				
RA-452M/MS-V7-Y/Y(5)	4,500 (3,600~5,400)*	8,000V	8,000V max.	1,000(DC1,000V)	AC2,000V 60s			

* Reference Value
Operating Temperature: -40~+85°C

• Dimensions Taping item

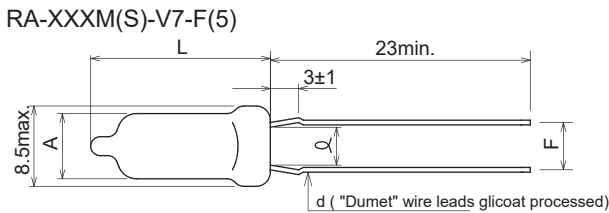
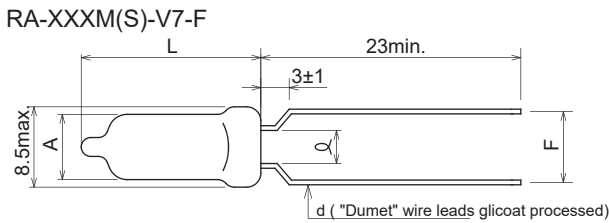


• Dimension Details

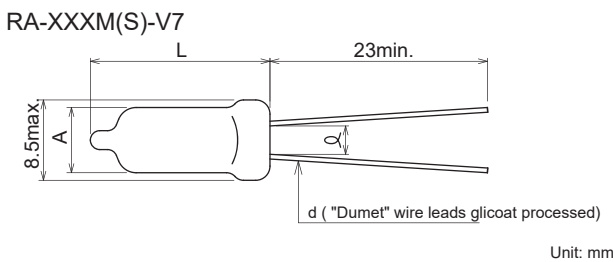
Description	Symbol	Dimension (mm)	
		RA-M(S)-V7-Y	RA-M(S)-V7-Y(5)
RA	High	L	19.0 max.(16.0 max.)
	Lamp Diameter	A	φ 6.9±0.65
	Lead Diameter	d	φ 0.5±0.05
	Lead clearance	Δh	4.0 min.
Height from PCB top	L ₁	22.0 max.(19.0 max.)	
Lamp pitch	P	15.0±1.0	12.7±1.0
Hole pitch	P ₀	15.0±0.3*	12.7±0.3*
Hole position	P ₁	3.75±0.7	3.85±0.7
	P ₂	7.5±1.3	6.35±1.3
Lead pitch	F	7.5±0.5	5.0 ^{+0.6} _{-0.2}
Declining	Δh		±2.0
Paper width	W		18.0±0.5
Hole position	W ₁		9.0±0.5
Lead clinch height	H ₀		16.0±0.5
Product height *2	H ₁		38.5(35.5)
Hole diameter	D ₀		φ 4.0±0.2
Paper thickness	t		0.9 max.

*2 Nominal value

• Dimensions Single item (Forming lead type)



• Dimensions Single item (Standard lead type)

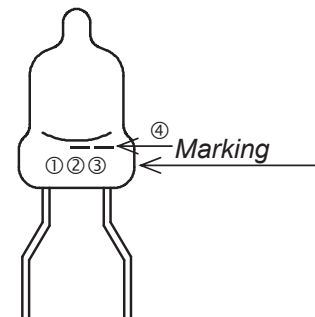


• Packing Quantity per Carton

A-XXXM(S)-V7-Y Series: 1,500 pcs/1box

RA-XXXM(S)-V7-Y(5) Series: 1,800 pcs/1box

• Description of marking



①.....DC Breakdown Voltage

Discharge voltage symbol	501	601	102	152	242	302	362	402	452
Symbol	F	A	J	K	T	L	S	V	Y

②.....Identification of manufacture year eg.) 2023→3

③..... 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

④.....Japan production: --, China production: None

* Single items (Forming lead type and standard lead type) have different marking identification. Please contact us for details.

Safety Standard

UL	UL/cUL	TÜV	Model Number
○ ⁻¹	-	-	RA-501M/MS-V7-Y/Y(5)
○ ^{-1/2}	-	-	RA-601M/MS-V7-Y/Y(5)
○ ^{-1/2}	-	-	RA-102M/MS-V7-Y/Y(5)
○ ^{-1/2}	-	-	RA-152M/MS-V7-Y/Y(5)
-	○ ⁻¹	-	RA-242M/MS-V7-Y/Y(5)
-	○ ^{-1/2}	○ ⁻³	RA-302M/MS-V7-Y/Y(5)
-	○ ^{-1/2}	○ ⁻³	RA-362M/MS-V7-Y/Y(5)
-	○ ⁻²	○ ⁻³	RA-402M/MS-V7-Y/Y(5)
-	○ ⁻²	○ ⁻³	RA-452M-/MS-V7-Y/Y(5)

Rated voltage <A>: Approved if it is connected to UL approved varistor .

	A	B
*1	AC125V	V1.0≥270V, D≥φ5mm
*2	AC250V	V1.0≥390V, D≥φ7mm
*3	AC125V / AC250V	V1.0≥470V, D≥φ5mm