

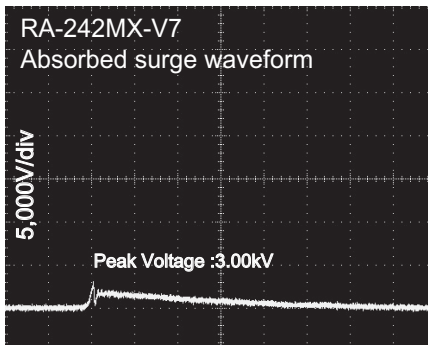
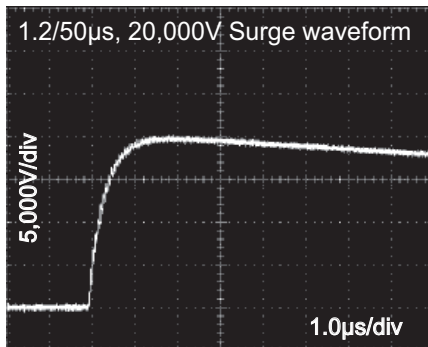


### Features

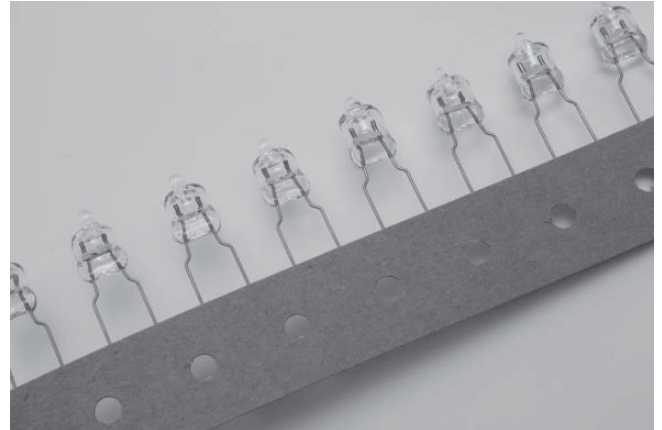
- Invented 3mm height smaller size of RA-MX-V7 Series compare with present productions
- Dielectric strength voltage test compliant
- High-speed response of surge
- Wide range of lineup from DC500V to DC4,500V
- Will be soon approved for UL, CSA, TÜV

### Applications

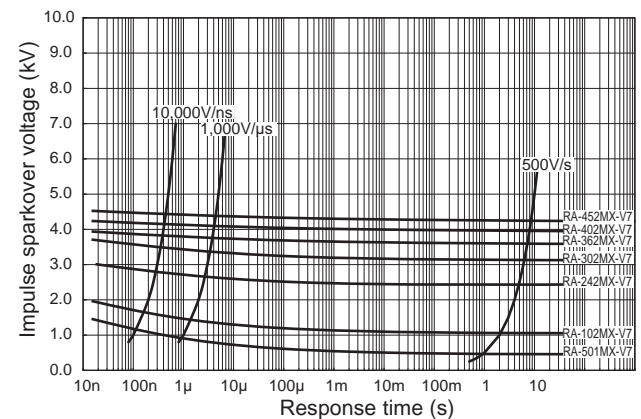
- Switching power supply, Inverter power supplies
- Refrigerator, Laundry machine, Air conditioner
- LED Lighting
- Copier, Telecommunication equipment
- *Impulse Absorption Characteristics*



Safety Standard		File No.
UL	:UL1449 3rd.	E322107
CSA	:C22.2 No.60065	105073
TÜV	:EN60065 :EN60950-1	J50114145



### V-t Characteristics



### Electrical Specifications

Model Number	DC Breakdown Voltage (V)	Impulse Sparkover Voltage 1.2/50 $\mu$ s (V) max.		Insulation Resistance (M $\Omega$ ) min.	Capacitance 1MHz (pF) max.	Impulse Life test 8/20 $\mu$ s 100A	Impulse Current Capacity 8/20 $\mu$ s (A)	Withstanding Voltage
		Applied Voltage	Specification					
RA-501MX-V7-Y/Y(5)	500(400~600)	5,000V	5,000V max.	1000(DC100V)	1.0	300 times	3,500	—
RA-601MX-V7-Y/Y(5)	600(480~720)			1000(DC250V)				—
RA-102MX-V7-Y/Y(5)	1,000(800~1,200)			—				—
RA-152MX-V7-Y/Y(5)	1,500(1,200~1,800)			—				—
RA-242MX-V7-Y/Y(5)	2,400(1,920~2,880) *			1000(DC500V)				AC1,250V 3s
RA-302MX-V7-Y/Y(5)	3,000(2,400~3,600) *			—				AC1,500V 60s
RA-362MX-V7-Y/Y(5)	3,600(2,880~4,320) *			—				AC1,800V 3s
RA-402MX-V7-Y/Y(5)	4,000(3,200~4,800) *	7,500V	7,500V max.	—	—	—	AC2,000V 60s	
RA-452MX-V7-Y/Y(5)	4,500(3,600~5,400) *	8,000V	8,000V max.	1000(DC1000V)	—	—	—	AC2,000V 60s

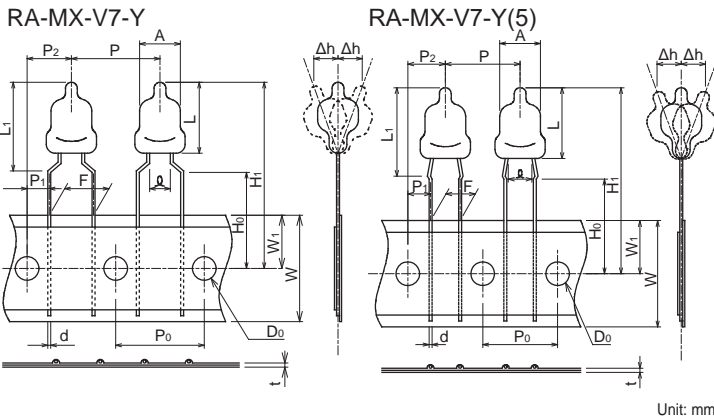
\* Reference Value  
Operating Temperature: -20~+80°C



# RA-MX-V7-Y/ Y(5) SERIES SURGE PROTECTIVE DEVICES



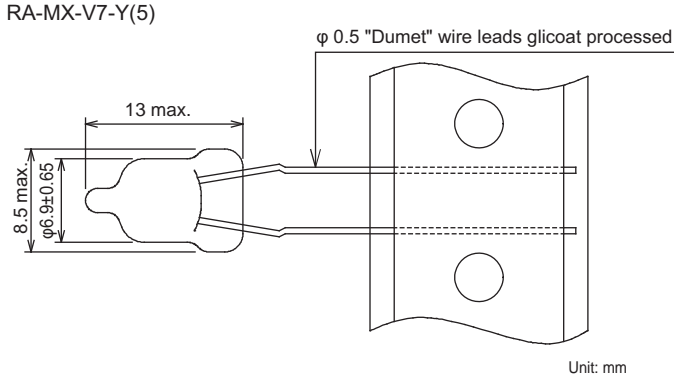
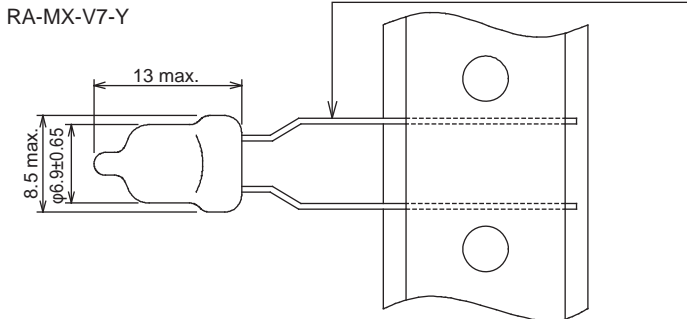
● **Taping Dimensions**



Unit: mm

Description	Symbol	Dimension (mm)	
		RA-MX-V7-Y	RA-MX-V7-Y(5)
High	L	13.0 max.	
Lamp Diameter	A	φ 6.9±0.65	
Lead Diameter	d	φ 0.5±0.05	
Leads clearance	ℓ	4.0 min.	
Height from PCB top	L <sub>1</sub>	18.0 max.	
Lamp pitch	P	15.0±1.0	12.7±1.0
Hole pitch	P <sub>0</sub>	15.0±0.3	12.7±0.3
Hole position	P <sub>1</sub>	3.75±0.7	3.85±0.7
	P <sub>2</sub>	7.5±1.3	6.35±1.3
Lead pitch	F	7.5±0.5	5.0± <sup>0.6</sup> / <sub>0.2</sub>
Declining	Δh	±2.0	
Paper width	W	18.0±0.5	
Hole position	W <sub>1</sub>	9.0±0.5	
Lead clinch height	H <sub>0</sub>	16.0±0.5	
Product height*	H <sub>1</sub>	(34.5)	
Hole diameter	D <sub>0</sub>	φ 4.0±0.2	
Paper thickness	t	0.9 max.	

● **Forming Dimensions**



Unit: mm

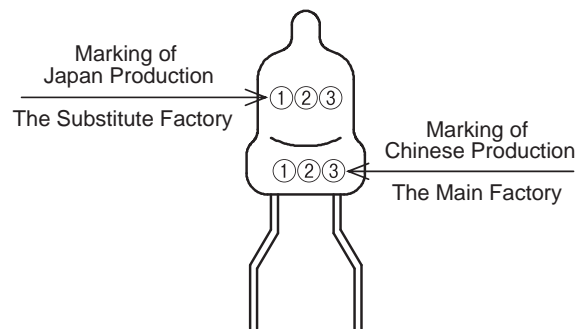
\*Accumulated pitch error

	4 pitch	20 pitch
RA-MX-V7-Y	60.0±0.6	300±1.5
RA-MX-V7-Y(5)	50.8±0.6	254±1.5

● **Packing Quantity per Carton**

RA-MX-V7-Y Series: 1,500 pcs  
RA-MX-V7-Y(5) Series: 1,800 pcs

● **Packing Description of Marking**



① .....DC Breakdown Voltage

DC Sparkover voltage brevity code	501	601	102	152	242	302	362	402	452
Code	F	A	J	K	T	L	S	V	Y

② .....The year manufactured eg.) 2016→6

③ .....The month manufactured (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

**Safety Standard**

UL	CSA	TÜV	Model Number
○ <sub>-1</sub> <sup>-3</sup>	○ <sub>-5</sub> <sup>-4</sup>	-	RA-501MX-V7-Y/Y(5)
○ <sub>-1</sub> <sup>-3</sup>	○ <sub>-5</sub> <sup>-4</sup>	-	RA-601MX-V7-Y/Y(5)
○ <sub>-2</sub> <sup>-3</sup>	○ <sub>-5</sub> <sup>-4</sup>	-	RA-102MX-V7-Y/Y(5)
○ <sub>-2</sub> <sup>-3</sup>	○ <sub>-5</sub> <sup>-4</sup>	-	RA-152MX-V7-Y/Y(5)
○ <sub>-2</sub> <sup>-3</sup>	○ <sub>-5</sub> <sup>-4</sup>	-	RA-242MX-V7-Y/Y(5)
○ <sub>-1</sub> <sup>-3</sup>	○ <sub>-5</sub> <sup>-4</sup>	○ <sup>-6</sup>	RA-302MX-V7-Y/Y(5)
○ <sub>-1</sub> <sup>-3</sup>	○ <sub>-5</sub> <sup>-4</sup>	○ <sup>-6</sup>	RA-362MX-V7-Y/Y(5)
○ <sub>-1</sub> <sup>-3</sup>	○ <sub>-5</sub> <sup>-4</sup>	○ <sup>-6</sup>	RA-402MX-V7-Y/Y(5)
○ <sub>-1</sub> <sup>-3</sup>	○ <sub>-5</sub> <sup>-4</sup>	○ <sup>-6</sup>	RA-452MX-V7-Y/Y(5)

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

	A	B
*1	AC125V	V1.0≥270V, D≥φ7mm
*2	AC125V	V1.0≥270V, D≥φ5mm
*3	AC250V	V1.0≥390V, D≥φ7mm
*4	AC125V	V1.0≥270V, D≥φ14mm
*5	AC250V	V1.0≥470V, D≥φ14mm
*6	AC125V / AC250V	V1.0≥470V, D≥φ5mm