

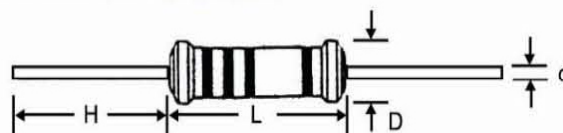
HIGH VOLTAGE METAL GLAZE RESISTORS

RV (RVS) SERIES

Features

- * Standard coating - epoxy, silicon, flameproof coating on request
- * Suitable for high voltage and high pulse loading capability
- * Highly stable performance and highly reliable
- * Operating temperature range $-55^{\circ}\text{C} \sim +225^{\circ}\text{C}$
- * Flameproof Construction UL-94V0

Construction



General Specification

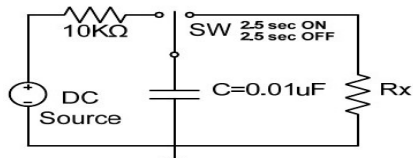
Style		Dimensions (mm)				Resistance Range
RV	RVS	L	D	d	H	
1/4W	1/2W	6.5 ± 0.5	2.3 ± 0.3	0.55 ± 0.03	28 ± 2.0	100K ~ 500M
1/2W	1W	9.0 ± 1.0	3.2 ± 0.5	0.65 ± 0.03	26 ± 2.0	100K ~ 500M
1W	2W	11.5 ± 1.0	4.5 ± 0.5	0.78 ± 0.03	35 ± 2.0	100K ~ 500M
2W	3W	15.5 ± 1.0	5.5 ± 0.5	0.78 ± 0.03	32 ± 2.0	100K ~ 500M
3W	5W	17.5 ± 1.0	6.0 ± 0.5	0.78 ± 0.03	35 ± 2.0	100K ~ 500M

Power Rating		Max. Working (VOL)	Max. Overload (VOL)	Dielectric Withstanding (VOL)	Resistance Tolerance	T.C.R
1/4W	(RV)	1600V	2000V	400V	J = 5% for E24	Standard: $\pm 200\text{ppm}/^{\circ}\text{C}$ $100\text{K} \leq R \leq$
1/2W	(RV)	3500V	4000V	500V		
	(RVS)	1700V	2500V	400V	F = 1% for E24 $100\text{K} \leq R \leq 33\text{M}$	$\pm 500\text{ppm}/^{\circ}\text{C}$ $R > 10\text{M}$
1W	(RV)	4500V	5000V	500V		
	(RVS)	4000V	4500V	500V		
2W	(RV)	7000V	14000V	700V		
	(RVS)	5000V	10000V	500V		
3W	(RV)	12000V	16000V	1000V		
	(RVS)	10000V	14000V	700V		Special: $\pm 100\text{ppm}/^{\circ}\text{C}$ $\pm 50\text{ppm}/^{\circ}\text{C}$
5W	(RVS)	13000V	18000V	1000V		

* The maximum number can be produced to 1G

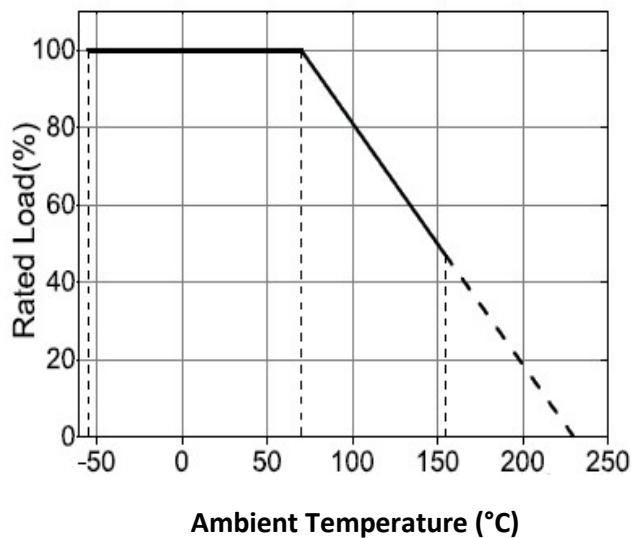


Electrical Characteristics

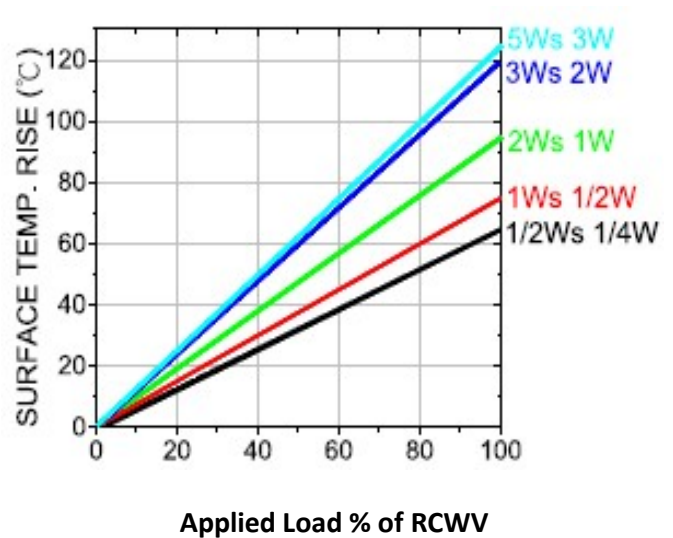
Characteristics	Specification	Test Method																
Temperature Coefficient	By Type	Resistance value at room (+25°C) Temp. and room Tempe. (+ 125°C)																
Dielectric withstanding voltage	By Type	In V-Block for 1 min.																
Resistance to soldering heat	$\triangle$ R within $\pm$ (1.0%+0.05Ω)	260°C $\pm$ 5°C, 2s $\pm$ 1s																
Moisture resistance	$\triangle$ R within $\pm$ (5% +0.05Ω)	40°C $\pm$ 2°C, 90%~95%RH, 1,000h (For Epoxy Resin) 90 min ON; 30 min OFF																
Terminal Strength	Tensile : $\geq$ 2.5kg	Direct load for 10 sec. In the direction off the terminal leads.																
Short Time Overload	$\triangle$ R within $\pm$ (1% +0.05Ω)	Rated Voltage x 2.5 or Max. Overload Vol., whichever is lower, for 5sec.																
Intermittent overload	$\triangle$ R within $\pm$ (1% +0.05Ω)	4 times RCWV for 10000 cycles (1 sec. ON , 25secs.OFF)																
Insulation Resistance	$\pm$ 10,000MΩ Over	500 $\pm$ 50V DC During 1 min V-Block method																
Load Life	$\triangle$ R within $\pm$ (3% +0.05Ω)	1000 hours at rated voltage, 70°C 90 min ON; 30 min OFF																
Resistance to Solvent	No abnormality in coatings and markings.	IPA for 5 $\pm$ 0.5 Min. with ultrasonic																
Anti Surge Characteristics	$\triangle$ R within $\pm$ (10% +0.05Ω)																	
	Discharge Test:0.01uF capacitor Discharge Pulse 10 times. (1 pulse/5 sec. Max)																	
																		
	Type	<table><tr><td>RV</td><td>RVS</td><td>RV</td><td>RVS</td><td>RV</td><td>RVS</td><td>RV</td><td>RVS</td></tr><tr><td>1/4W</td><td>1/2W</td><td>1/2W</td><td>1W</td><td>1W/2W</td><td>2W/3W</td><td>3W</td><td>5WS</td></tr></table>	RV	RVS	RV	RVS	RV	RVS	RV	RVS	1/4W	1/2W	1/2W	1W	1W/2W	2W/3W	3W	5WS
	RV	RVS	RV	RVS	RV	RVS	RV	RVS										
1/4W	1/2W	1/2W	1W	1W/2W	2W/3W	3W	5WS											
Voltage	<table><tr><td rowspan="3">3KV</td><td>1K$\leq$R < 10K ; 5KV</td><td rowspan="3">10KV</td><td rowspan="3">15KV</td></tr><tr><td>10K$\leq$R < 100K ; 7KV</td></tr><tr><td>100K$\leq$ R: 10KV</td></tr></table>	3KV	1K $\leq$ R < 10K ; 5KV	10KV	15KV	10K $\leq$ R < 100K ; 7KV	100K $\leq$ R: 10KV											
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	10K $\leq$ R < 100K ; 7KV																	
	100K $\leq$ R: 10KV																	



Power Graph



Hot-Spot Temperature



Parts Number System

RV (RVS) Type High voltage Metal Glaze Resistors	025 Wattage 1/4W=025 1/2W=050 1W=100 2W=200 3W=300 5W=500	102 Resistance 3 digit code for 5% 104= 100K 4 digit code for 1% 1003= 100K	J Tolerance F = $\pm 1\%$ J = $\pm 5\%$ On request	R Standard Packing T=Ammo tape box R=Tape reel B=Bulk pack
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