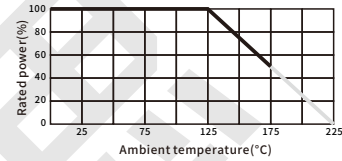


100% High Voltage Test before Delivery, Low VCR, Low TCR High Reliability, Max. Operating Voltage up to 48 KV Standard TCR $\pm 100\text{ppm}/^\circ\text{C}$ Non-Inductive Design

Introduction

For high-voltage resistor, suitable coating materials is key to balance the heat dissipation capacity and insulation performance. Generally speaking, the heat dissipation capacity of silicone resin is better than that of epoxy resin, but the insulating capacity is not as good as epoxy resin. HVLR series use high-level epoxy resin coating material that is good at both insulation and heat dissipation capabilities. There is no air bubbles on the surface after the encapsulation, and the insulation ability is significantly better than silicone resin and other epoxy resins. The heat dissipation capacity is also better than other types of epoxy resin.

The mainstream high-voltage resistors are mainly thick-film technology. The resistance will change in a high-voltage working condition. This is because thick-film resistors are made of a mixture of conductive and non-conductive resistive elements. The low VCR is determined by the quality of resistance paste and manufacturing process. HVLR series is 100% tested before shipment to ensure the performance of each resistor under high-voltage conditions.



Specifications & Dimensions (mm)									
Model	Rated Power	Max. Working Voltage	Resistance Range (Ω)		Tolerance	TCR	Dimensions (mm)		
			Min.	Max.			A	B	C
HVLR1505	0.7W	2.5KV	1K	1G	$\pm 1\%(F), \pm 2\%(G), \pm 5\%(J), \pm 10\%(K)$	$\pm 100\text{ppm}(K)$	15 \pm 1.5	5 \pm 1.0	0.8
HVLR1905	1W	3.5KV	1K	1G	$\pm 1\%(F), \pm 2\%(G), \pm 5\%(J), \pm 10\%(K)$	$\pm 100\text{ppm}(K)$	19 \pm 1.5	5 \pm 1.0	0.8
HVLR2505	1.2W	5.5KV	1K	1G	$\pm 1\%(F), \pm 2\%(G), \pm 5\%(J), \pm 10\%(K)$	$\pm 100\text{ppm}(K)$	25.4 \pm 1.5	5 \pm 1.0	0.8
HVLR2408	2W	5.5KV	1K	1G	$\pm 1\%(F), \pm 2\%(G), \pm 5\%(J), \pm 10\%(K)$	$\pm 100\text{ppm}(K)$	24 \pm 1.5	8 \pm 1.0	1.0
HVLR3908	3W	10KV	1K	1G	$\pm 1\%(F), \pm 2\%(G), \pm 5\%(J), \pm 10\%(K)$	$\pm 100\text{ppm}(K)$	39 \pm 1.5	8 \pm 1.0	1.0
HVLR5208	5W	15KV	1K	1G	$\pm 1\%(F), \pm 2\%(G), \pm 5\%(J), \pm 10\%(K)$	$\pm 100\text{ppm}(K)$	52 \pm 1.5	8 \pm 1.0	1.0
HVLR7609	7.5W	22.5KV	1K	1G	$\pm 1\%(F), \pm 2\%(G), \pm 5\%(J), \pm 10\%(K)$	$\pm 100\text{ppm}(K)$	76 \pm 1.5	9 \pm 1.0	1.0
HVLR1029	10W	32KV	1K	1G	$\pm 1\%(F), \pm 2\%(G), \pm 5\%(J), \pm 10\%(K)$	$\pm 100\text{ppm}(K)$	102 \pm 1.5	9 \pm 1.0	1.0
HVLR1179	11W	35KV	1K	1G	$\pm 1\%(F), \pm 2\%(G), \pm 5\%(J), \pm 10\%(K)$	$\pm 100\text{ppm}(K)$	117 \pm 1.5	9 \pm 1.0	1.0
HVLR1279	12W	40KV	1K	1G	$\pm 1\%(F), \pm 2\%(G), \pm 5\%(J), \pm 10\%(K)$	$\pm 100\text{ppm}(K)$	127 \pm 1.5	9 \pm 1.0	1.0
HVLR1379	13W	45KV	1K	1G	$\pm 1\%(F), \pm 2\%(G), \pm 5\%(J), \pm 10\%(K)$	$\pm 100\text{ppm}(K)$	137 \pm 1.5	9 \pm 1.0	1.0
HVLR1529	15W	48KV	1K	1G	$\pm 1\%(F), \pm 2\%(G), \pm 5\%(J), \pm 10\%(K)$	$\pm 100\text{ppm}(K)$	152 \pm 1.5	9 \pm 1.0	1.0

Electrical Parameters

Short-Time Overload: Apply 5 times rated power for 5s, no more than 1.5 times the max operating voltage, $\Delta R < 0.5\%$

Moisture Resistance: MIL-STD-202, Method 106, $\Delta R < 0.4\%$

Insulation Resistance: $> 10000M$

Load Life: Apply rated power for 1000 hours, $\Delta R < 0.7\%$

Thermal Shock: MIL-STD-202, Method 107, Cond C, $\Delta R < 0.25\%$

Standard TCR: $\pm 100\text{ppm}/^\circ\text{C}$ ($-25^\circ\text{C} \sim +105^\circ\text{C}$, $+25^\circ\text{C}$ Ref)

Part Number Information														
Example: HVLR1529K10M0K9 (HVLR 1529 $\pm 10\%$ 10M Ω $\pm 100\text{ppm}$)														
H	V	L	R	1	5	2	9	K	1	0	M	0	K	9
Series HVLR			Size (Length*Diameter) 1505=15*5 1029=102*9 2505=25*5 1179=117*9			Tolerance F= $\pm 1\%$ G= $\pm 2\%$ J= $\pm 5\%$ K= $\pm 10\%$		Resistance 1K00=1000R 1M00=1000000R 1G00=1000000000R			TCR K= $\pm 100\text{ppm}$		Code 9=Standard	