## Metal Glazed Film Resistors

# High Voltage & High Ohmic Type

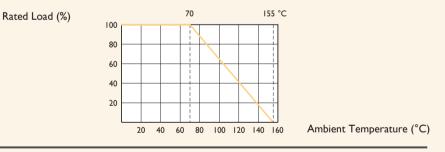
Normal & Miniature Style [ HHV Series ]

#### FEATURE

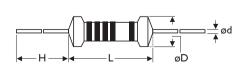
Power Rating	1/4W, 1/2W, 1W, 2W, 3W
Resistance Tolerance	±1%, ±5%
T.C.R.	±200ppm/°C
- Flameproof Multi-layer Coating Meets	UL-94V-0
Flameproof Feature Meets Overload Test	UL-1412

#### DERATING CURVE

For resistors operated in ambient temperatures above 70°C, power rating must be derated in accordance with the curve below.



#### DIMENSIONS



5th color code: yellow

STYLE		DIMENSION				
Normal	Miniature	L	øD	н	ød	
HHV-25	HHV50S	6.3±0.5	2.4±0.2	28±2.0	0.55±0.05	
HHV-50	HHVISS	9.0±0.5	3.3±0.3	26±2.0	0.55±0.05	
HHVIWS	HHV2SS	11.5±1.0	4.5±0.5	35±2.0	0.8±0.05	
HHV2WS	HHV3SS	15.5±1.0	5.0±0.5	33±2.0	0.8±0.05	



#### INTRODUCTION

The HHV Series High Voltage & High Ohmic Resistors are made of metal glaze film, with tinned connecting leads of electrolytic copper welded to the end-caps. The resistors are coated with layers of pink color lacquer.

Unit: mm

-		
Note:		

### **ELECTRICAL CHARACTERISTICS**

STYLE	HHV-25	HHV50S	HHV-50	HHVISS	HHVIWS	HHV2SS	HHV2WS	HHV3S5
Power Rating at 70°C	1/4W	1/2W		IW		2W		3W
Maximum Working Voltage (DC)	1,600V		3,500V		5,000V		7,000∨	
Maximum Overload Voltage (DC)	3,000V		7,000∨		10,000V		14,000V	
Voltage Proof on Insulation	300V		500V		700V			
Resistance Range	100KΩ - 68MΩ for E24 & E96 series value							
Operating Temp. Range	-55°C to +155°C							
Temperature Coefficient	±200pm/°C							

Note: Special value is available on request

## ENVIRONMENTAL CHARACTERISTICS

PERFORMANCE TEST	TEST METHOD		APPRAISE
Short Time Overload	IEC 60115-14.13	2.5 times RCWV for 5 sec. (Not more than maximum Overload Voltage)	±2.0%+0.05Ω
Voltage Proof on Insulation	IEC 60115-14.7	In V-Block for 60 sec., test voltage as above table	No Breakdown
Temperature Coefficient	IEC 60115-14.8	Between -55°C to +155°C	By type
Insulation Resistance	IEC 60115-14.6	in V-block for 60 Sec.	>10,000MΩ
Solderability	IEC 60115-1 4.17	245±5°C for 3±0.5 Sec.	95% Min. coverage
Solvent Resistance of Marking	IEC 60115-14.30	IPA for 5±0.5 Min. with ultrasonic	No deterioration of coatings and markings
Robustness of Terminations	IEC 60115-14.16	Direct load for 10 Sec. in the direction of the terminal leads	≥2.5kg (24.5N)
Periodic-pulse Overload	IEC 60115-1 4.39	4 times RCWV 10,000 cycles (1 Sec. on, 25 Sec. off)	±1.0%+0.05Ω
Damp Heat Steady State	IEC 60115-1 4.24	40±2°C, 90-95% RH for 56 days, loaded with 0.1 times RCWV	±5.0%+0.05Ω
Endurance at 70°C	IEC 60115-1 4.25	70±2°C at RCWV (or Umax., Whichever less) for 1,000 Hr. (1.5Hr.on, 0.5Hr. Off)	±5.0%+0.05Ω
Temperature Cycling	IEC 60115-1 4.19	-55°C ⇔ Room Temp. ⇔ +155°C ⇔ Room Temp. (5 cycles)	±1.0%+0.05Ω
Resistance to Soldering Heat	IEC 60115-1 4.18	260±3°C for 10±1 Sec., immersed to a point 3±0.5mm from the body	±1.0%+0.05Ω
Accidental Overload Test	IEC 60115-1 4.26	4 times RCWV for 1 Min.	No evidence of flaming or arcing

Note: RCWV(Rated Continuous Working Voltage) =  $\sqrt{Power Rating \times Resistance Value}$  or Max. working voltage listed above, whichever less.

37

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Metal Film Resistors - Through Hole category:

Click to view products by Yageo manufacturer:

Other Similar products are found below :

FRN25J330R FRN50J1R0S H4100RBYA H415RBZA H41K1BYA H41K5BYA H41M0BDA H420R5BCA H421R5BZA H4221RBYA H424K3BDA H442K2BDA H45K62BZA H4634RBZA H473R2BZA H4931KBZA H8160KFDA H8274KBZA H82K0FDA H82K0FZA H87K5DYA RLR05C6201GS HR01623J HR01682J 270-1.69M-RC LR0204F110R LR0204F18R LR0204F20K LR0204F20R LR0204F510R LR1F121R LR1F133K LR1F383R LR1F3K01 LR1F4K75 LR2F330RJIT LR2F51R LR2F910R ERX-2SZJR20E SQMR74K7J FMF-25FTF52-100K FRN50J100RS FRN50J470RS H4100RBZA H414R3BZA H415KBYA H4174KBZA H4174RBDA H41K21BYA H41K43BDA