

High Ohmic Value (up to 1.5 G Ω), High Power Resistors (up to 10 W at 25 °C) Thick Film



FEATURES

- High ohmic values up to 1.5 G Ω
- Power rating up to 10 W at +25 °C
- Molded or coated
- Ceramic core
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912


RoHS
COMPLIANT

DIMENSIONS in millimeters

The diagram illustrates the physical dimensions of HPS series resistors in two configurations: COATED and MOLDED.

COATED Type: This drawing shows a resistor with a central body of length A and diameter $\varnothing B$. It has leads of length 25 mm and diameter $\varnothing E$. The mounting holes have a diameter of $\varnothing a \pm 0.02$. The distance between the mounting holes is L max. A 45° chamfer with a maximum depth of 0.25 mm is indicated on the leads. The leads are shown with a thickness of 4 mm.

MOLDED Type: This drawing shows a resistor with a central body of length A and diameter $\varnothing B$. It has leads of length 25 mm and diameter $\varnothing E$. The distance between the mounting holes is L max. The leads are shown with a thickness of 4 mm.

SERIES AND STYLE	A	$\varnothing B$	$\varnothing E \pm 0.1$	WEIGHT g	FINISH
HPS58	6.5 ± 0.2	2.4 ± 0.1	0.6	0.24	Molded
HPS63	10 ± 0.2	3.7 ± 0.1		0.29	
HPS68	15 ± 0.2	5.6 ± 0.3		0.67	
HPS523	23 ± 2.3	5 ± 0.3	0.8	1.23	Coated
HPS923	23 ± 2.5	9 ± 0.5		4.60	
HPS932	32 ± 2.5	9 ± 0.5		5.27	
HPS947	47 ± 2.5	9 ± 0.5		7.18	

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	RESISTANCE RANGE Ω	RATED POWER $P_{25\text{ }^{\circ}\text{C}}$ W	LIMITING ELEMENT VOLTAGE V	TOLERANCE $\pm \%$	TEMPERATURE COEFFICIENT $\pm \text{ppm}/^{\circ}\text{C}$	CRITICAL RESISTANCE (Ω)	CLIMATIC CATEGORY
HPS58	200 to 100M	1	300	0.5, 1, 2, 5, 10	150	90K	-55 °C/ +200 °C/ 56 days
HPS63	200 to 175M	2	700	0.5, 1, 2, 5, 10	150	245K	
HPS68	300 to 400M	3	1500	0.5, 1, 2, 5, 10	150	750K	
HPS523	800 to 650M	4	2000	0.5, 1, 2, 5, 10	150	1M	
HPS923	1K to 1G	6	2500	0.5, 1, 2, 5, 10	150	1.041M	
HPS932	1K to 1G	8	5000	0.5, 1, 2, 5, 10	150	3.125M	
HPS947	2K to 1.5G	10	8000	0.5, 1, 2, 5, 10	150	6.4M	

MARKING

GEKA trade-mark, series, style, nominal resistance (in Ω), tolerance (in %), letter P for TCR $\pm 150 \text{ ppm}/^{\circ}\text{C}$, manufacturing date. Because of lack of space, small styles are marked with ohmic value (in Ω), tolerance (in %) and letter P.

ORDERING INFORMATION

HPS	68	50 M Ω	10 %	150 ppm/°C	BL20	e1
MODEL	SIZE	OHMIC VALUE	TOLERANCE	TEMPERATURE COEFFICIENT	PACKAGING	LEAD (Pb)-FREE



GLOBAL PART NUMBER INFORMATION														
H P S			0	6	8	5	0	0	5	K	P	B	1	5
GLOBAL MODEL	STYLE	OHMIC VALUE			TOLERANCE			TEMPERATURE COEFFICIENT			PACKAGING			SPECIAL
HPS	HPS: 58 to 947	The first three digits are significant figures and the last digit specifies the number of zeros to follow. R designates decimal point. 1006 = 100 M Ω 5104 = 5.1 M Ω 3303 = 330 k Ω 5005 = 50 M Ω ...			D = 0.5 % F = 1 % G = 2 % J = 5 % K = 10 %			P = 150 ppm K = 100 ppm			B15 = blister (20 pieces) B19 = blister (30 pieces) A18 = ammpack (400 pieces) A20 = ammpack (500 pieces) B17 = blister (25 pieces) R10 = reel (500 pieces) as applicable			As applicable



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