

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



## FEATURES

- High ohmic values up to 1.5 G $\Omega$
- 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](http://www.vishay.com/doc?99912)


**RoHS**  
COMPLIANT

## DIMENSIONS in millimeters

Diagram illustrating the dimensions of a Coated Resistor. The resistor has a central body of length  $A$  and diameter  $\varnothing B$ . The leads have a diameter of  $\varnothing E$  and a length of 25 min. The mounting holes have a diameter of  $\varnothing a \pm 0.02$  and are spaced 4 mm from the body ends. The total length is  $L$  max. A 45° chamfer with a maximum depth of 0.25 mm is shown on the lead ends.

Diagram illustrating the dimensions of a Molded Resistor. The resistor has a central body of length  $A$  and diameter  $\varnothing B$ . The leads have a diameter of  $\varnothing E$  and a length of 25 min. The body is molded.

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

## STANDARD ELECTRICAL SPECIFICATIONS

MODEL	RESISTANCE RANGE $\Omega$	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 ( $\Omega$ )	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  $\Omega$ ), 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  $\Omega$ ), tolerance (in %) and letter P.

## ORDERING INFORMATION

HPS	68	50 M $\Omega$	10 %	150 ppm/ $^{\circ}\text{C}$	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 $\Omega$ 5104 = 5.1 M $\Omega$ 3303 = 330 k $\Omega$ 5005 = 50 M $\Omega$ ...			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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