

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



FEATURES

- RoHS for most values, please consult us
- 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

Diagram illustrating the dimensions of a Coated Resistor (HPS series). The resistor is shown in cross-section, highlighting the lead length (25 min.), lead diameter ($\varnothing E$), lead thickness (4), body diameter ($\varnothing B$), mounting hole diameter ($\varnothing a \pm 0.02$), and the 45° chamfer (max. 0.25 mm deep). The body length is labeled $L \text{ max.}$.

Diagram illustrating the dimensions of a Molded Resistor (HPS series). The resistor is shown in cross-section, highlighting the lead length (25 min.), lead diameter ($\varnothing E$), lead thickness (4), and the 25 min. end flange length.

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 $P_{25^\circ\text{C}}$ 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/ $^\circ\text{C}$	BL20	e1
MODEL	SIZE	OHMIC VALUE	TOLERANCE	TEMPERATURE COEFFICIENT	PACKAGING	LEAD (Pb)-FREE



GLOBAL PART NUMBER INFORMATION															
H	P	S	0	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 MΩ 5104 = 5.1 MΩ 3303 = 330 kΩ 5005 = 50 MΩ ...				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 = Ammopack (400 pieces) A20 = Ammopack (500 pieces) B17 = Blister (25 pieces) R10 = Reel (500 pieces) As applicable			As applicable	



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