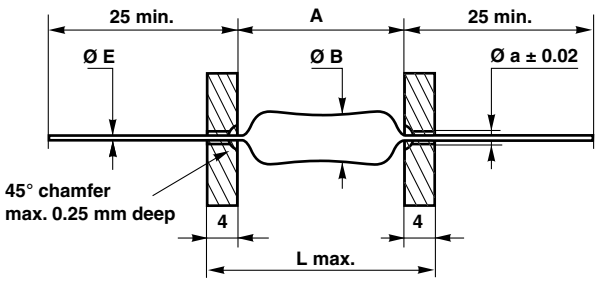
High Ohmic Values (up to 100 GΩ), High Voltage Resistors (up to 50 kV) Thick Film Technology

FEATURES

- Core: high purity ceramic
- Coating: epoxy
- Termination: standard lead material is solder coated copper
- Climatic category: -55 °C / +155 °C / 56 days
- High ohmic values: up to 100 GΩ
- High voltage application: up to 50 kV
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

RoHS COMPLIANT

DIMENSIONS in millimeters



SERIES	A	Ø B	Ø E ± 0.1	WEIGHT IN g
58	7 ± 0.2	1.6 ± 0.2	0.6	0.24
63	8.5 ± 0.5	2.2 ± 0.2		0.29
68	14 ± 1	3.5 ± 0.3	0.8	0.67
523	23 ± 2	4.5 ± 0.3		1.23
547	47 ± 2	4.5 ± 0.3		4.60
729	29 ± 2	6.5 ± 0.5		5.27
747	47 ± 2	4.5 ± 0.5		7.18
923	23 ± 2	8.5 ± 0.5		
932	32 ± 2			
947	47 ± 2			
972	72 ± 2			
9100	100 ± 2			

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	RESISTANCE RANGE Ω	RATED POWER $P_{70\,°C}$ W	LIMITING ELEMENT VOLTAGE V	TOLERANCE ± %	TEMPERATURE COEFFICIENT ± ppm/°C	CRITICAL RESISTANCE (Ω)
HTS58	200 to 200M	0.25	500	0.5, 1, 2, 5, 10	150	1M
HTS63	1K to 500M	0.5	1K	0.5, 1, 2, 5, 10	150	2M
HTS68	1K to 2.5G	1	2K	0.5, 1, 2, 5, 10	150	4M
HTS523	1K to 5G	1	5K	0.5, 1, 2, 5, 10	150	25M
HTS547	1K to 50G	1.5	15K	0.5, 1, 2, 5, 10	150	150M
HTS729	1K to 15G	2	10K	0.5, 1, 2, 5, 10	150	50M
HTS747	1K to 30G	2.5	15K	0.5, 1, 2, 5, 10	150	90M
HTS923	1K to 15G	2	8K	0.5, 1, 2, 5, 10	150	32M
HTS932	1K to 30G	2.5	15K	0.5, 1, 2, 5, 10	150	90M
HTS947	1K to 50G	3	20K	0.5, 1, 2, 5, 10	150	133.3M
HTS972	1K to 100G	4	30K	0.5, 1, 2, 5, 10	150	225M
HTS9100	1K to 100G	5	50K	0.5, 1, 2, 5, 10	150	500M

TECHNICAL SPECIFICATIONS

SERIES AND STYLES		HTS 58	HTS 63	HTS 68	HTS 523	HTS 547	HTS 729	HTS 747	HTS 923	HTS 932	HTS 947	HTS 972	HTS 9100
Power Rating at +70 °C		0.25 W	0.5 W	1 W	1 W	1.5 W	2 W	2.5 W	2 W	2.5 W	3 W	4 W	5 W
Ohmic Range in Relation to • Temperature Coefficient ± 150 ppm/°C • Tolerance	± 0.5 %	200 Ω 100 MΩ	1 kΩ 100 MΩ	1 kΩ 100 MΩ	1 kΩ 100 MΩ	1 kΩ 100 MΩ	1 kΩ 100 MΩ	1 kΩ 100 MΩ	1 kΩ 100 MΩ	1 kΩ 100 MΩ	1 kΩ 100 MΩ	1 kΩ 100 MΩ	1 kΩ 100 MΩ
	± 1 %		1 kΩ 250 MΩ	1 kΩ 500 MΩ	1 kΩ 500 MΩ	1 kΩ 1 GΩ	1 kΩ 1 GΩ	1 kΩ 1 GΩ	1 kΩ 1 GΩ	1 kΩ 1 GΩ	1 kΩ 1 GΩ	1 kΩ 1 GΩ	1 kΩ 1 GΩ
	± 2 %	1 kΩ 200 MΩ	1 kΩ 500 MΩ	1 kΩ 2.5 GΩ	1 kΩ 5 GΩ	1 kΩ 10 GΩ	1 kΩ 10 GΩ	1 kΩ 10 GΩ	1 kΩ 10 GΩ	1 kΩ 10 GΩ	1 kΩ 10 GΩ	1 kΩ 10 GΩ	1 kΩ 10 GΩ
	± 5 % ± 10 %					1 kΩ 50 GΩ	1 kΩ 15 GΩ	1 kΩ 30 GΩ	1 kΩ 15 GΩ	1 kΩ 30 GΩ	1 kΩ 50 GΩ	1 kΩ 100 GΩ	1 kΩ 100 GΩ
Limiting Element Voltage		0.5 kV	1 kV	2 kV	5 kV	15 kV	10 kV	15 kV	8 kV	15 kV	20 kV	30 kV	50 kV
Critical Resistance		1 MΩ	2 MΩ	4 MΩ	25 MΩ	150 MΩ	50 MΩ	90 MΩ	32 MΩ	90 MΩ	133.3 MΩ	225 MΩ	500 MΩ

MARKING

GEKA trade-mark, series, style, nominal resistance (in Ω), tolerance (in %), letter P for TCR ± 150 ppm/°C, manufacturing date. Because of lack of space, small styles are marked with ohmic value (in Ω), tolerance (in %) and letter P.

ORDERING INFORMATION

HTS	63	1M27	0.5 %	150 ppm/°C	AM500	e1
MODEL	SIZE	OHMIC VALUE	TOLERANCE	TEMPERATURE COEFFICIENT P: Standard: ± 150 ppm/°C	PACKAGING	LEAD (Pb)-FREE

GLOBAL PART NUMBER INFORMATION

H	T	S	0	0	6	3	1	2	7	4	D	P	A	2	0

GLOBAL MODEL	STYLE	OHMIC VALUE	TOLERANCE	TEMPERATURE COEFFICIENT	PACKAGING	SPECIAL
HTS	**HTS**: 58 to 9100	The first three digits are significant figures and the last digit specifies the number of zeros to follow. R designates decimal point. **5104** = 5.1 MΩ **3303** = 330 kΩ **1276** = 127 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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