

# High Ohmic Values (up to 100 G $\Omega$ ), High Voltage Resistors (up to 50 kV) Thick Film Technology

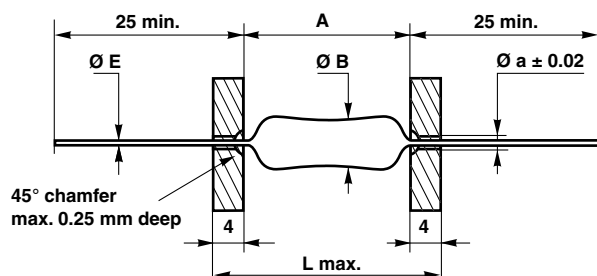


## FEATURES

- 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 G $\Omega$
- High voltage application: up to 50 kV
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://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 $\Omega$	RATED POWER $P_{70^\circ\text{C}}$ W	LIMITING ELEMENT VOLTAGE V	TOLERANCE $\pm \%$	TEMPERATURE COEFFICIENT $\pm \text{ppm}/^\circ\text{C}$	CRITICAL RESISTANCE ( $\Omega$ )
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	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ
	± 1 %	100 MΩ	100 MΩ	100 MΩ	100 MΩ	100 MΩ	100 MΩ	100 MΩ	100 MΩ	100 MΩ	100 MΩ	100 MΩ	100 MΩ
	± 2 %	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ
	± 5 %	200 MΩ	500 MΩ	2.5 GΩ	5 GΩ	10 GΩ	10 GΩ	10 GΩ	10 GΩ	10 GΩ	10 GΩ	10 GΩ	10 GΩ
	± 10 %					1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ	1 kΩ
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	PACKAGING	LEAD (Pb)-FREE
P: Standard: ± 150 ppm/°C						

**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 = ammpack (400 pieces) A20 = ammpack (500 pieces) B17 = blister (25 pieces) R10 = reel (500 pieces) as applicable	As applicable	



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