

# 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



RoHS

- Termination: standard lead material is solder coated copper
- Climatic category: -55 °C / +155 °C / 56 days
- $\bullet$  High ohmic values: up to 100  $\mbox{G}\Omega$
- High voltage application: up to 50 kV
- Material categorization: for definitions of compliance please see <a href="https://www.vishay.com/doc?99912">www.vishay.com/doc?99912</a>

DIMENSIONS in millimeters									
			SERIES	Α	ØВ	Ø E ± 0.1	WEIGHT IN		
25 min.	Α ,	25 min.	58	$7 \pm 0.2$	1.6 ± 0.2	0.6	0.24		
ØE	<b>→</b>	Ø a ± 0.02	63	$8.5 \pm 0.5$	2.2 ± 0.2	0.6	0.29		
	ØВ	4	68	14 ± 1	$3.5 \pm 0.3$	- 0.8	0.67		
	1		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		
45° chamfer max. 0.25 mm deep			747	47 ± 2	4.5 ± 0.5		7.10		
			923	23 ± 2	1				
-			932	32 ± 2	1				
			947	47 ± 2	8.5 ± 0.5		7.18		
			972	72 ± 2	1				
1			9100	100 ± 2					

STANDARD ELECTRICAL SPECIFICATIONS										
MODEL	RESISTANCE RANGE Ω	RANGE P <sub>70 °C</sub>		LIMITING ELEMENT VOLTAGE ± %		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				

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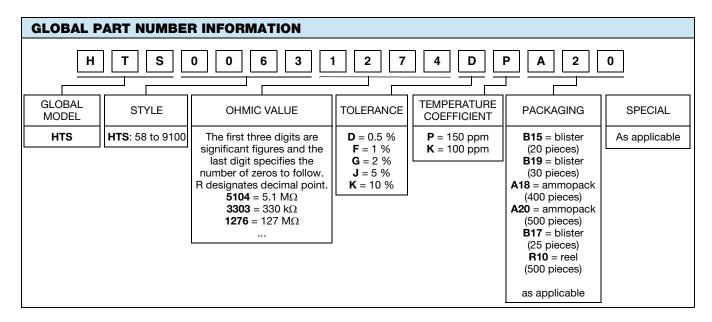


TECHNICAL SPECIFICATIONS													
SERIES AND STYLES		HTS 58	HTS 63	HTS 68	HTS 523	HTS 547	HTS 729	HTS 747	HTS 923	HTS 932	HTS 947	HTS 972	HTS 9100
Power Rating at +70 °C		0.25 W	0.5 W	1 W	1 W	1.5 W	2 W	2.5 W	2 W	2.5 W	3 W	4 W	5 W
Ohmic Range in Relation to • Temperature Coefficient ± 150 ppm/°C • Tolerance	± 0.5 %	200 Ω 100 MΩ	1 kΩ 100 MΩ	1 kΩ 100 MΩ	1 kΩ 100 MΩ								
	± 1 %		1 kΩ 250 MΩ	1 kΩ 500 MΩ	1 kΩ 500 MΩ	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 ΜΩ	2 ΜΩ	4 MΩ	25 MΩ	150 MΩ	50 MΩ	90 MΩ	32 MΩ	90 MΩ	133.3 M $\Omega$	225 M $\Omega$	500 MΩ

#### **MARKING**

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





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