

## Silicon Spreading Resistance Temperature Sensor in Miniature Metal Housing

KTY 16-6

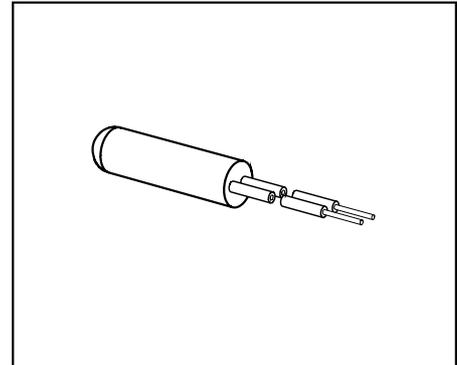
### Features

- Temperature dependent Resistor with Positive Temperature Coefficient
- Small metal housing with insulated leadwires
- Fast response
- High reliability due to multilayer gold contacts
- n-conducting silicon crystal
- Polarity independent due to symmetrical construction
- Selected at 25 °C;  $R_{25} = 2000 \Omega \pm 1\%$

Test voltage: 200 V ~

Isolation voltage: 20 V ~

Test duration: 1 s



Type	Marking	Ordering Code	Pin Configuration		Package
			1	2	
KTY 16-6	-	Q62705-K128	electrical contact, black	electrical contact, red	Ni-Plated brass tube housing: potential free

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Maximum operating voltage <sup>1)</sup> $T_A \leq 25 \text{ °C}, t \leq 10 \text{ ms}$	$V_{\text{opmax}}$	25	V
Maximum operating current	$I_{\text{opmax}}$	5	mA
Peak operating current $T_A \leq 25 \text{ °C}, t \leq 10 \text{ ms}$	$I_{\text{opp}}$	7	mA
Operating temperature range	$T_{\text{op}}$	- 50 ... + 150	°C
Storage temperature range	$T_{\text{stg}}$	- 50 ... + 150	°C

<sup>1)</sup> ESD Class 1. When the temperature sensor is operated with long supply leads, it should be protected through the parallel connection of a > 10 nF capacitor to prevent damage to the sensor through induced voltage peaks.

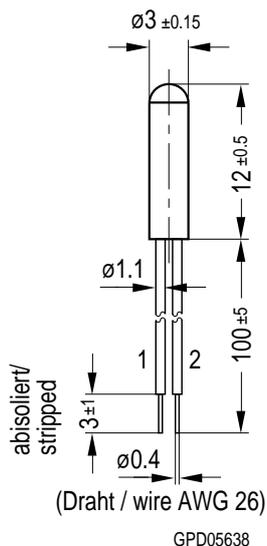
## Electrical Characteristics

at  $T_A = 25\text{ °C}$  unless otherwise specified

Parameter	Symbol	Limit Values			Unit
		min.	typ.	max.	
Temperature sensor resistance $I_B = 1\text{ mA}$	$R_{25}$	1980	–	2020	$\Omega$
Thermal time constant (63% of $\Delta T_A$ ) in still air	$\tau_{\text{air}}$	–	40	–	s
in still oil (Freon FC40/PP7)	$\tau_{\text{oil}}$	–	4	–	

## Package Outline

### Ni-plated Brass Tube Housing with Tefzel isolated leadwires



Weight approx. 0,7 g

Dimensions in mm

## Exterior Packaging

I.e. tubes, trays, boxes are shown in our Data Book "Package Information".

This datasheet has been download from:

[www.datasheetcatalog.com](http://www.datasheetcatalog.com)

Datasheets for electronics components.