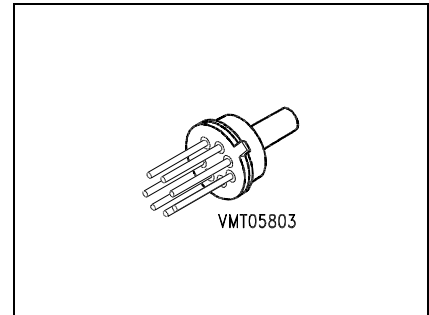


## Silicon Piezoresistive Absolute Pressure Sensor

KPY 62-AG  
...KPY 65-AG

- Low pressure and temperature hysteresis
- Fast response
- High sensitivity and linearity
- Fatigue free monocrystalline silicon diaphragm giving high load cycle stability
- High long term stability
- Built in silicon temperature sensor
- Metal housing

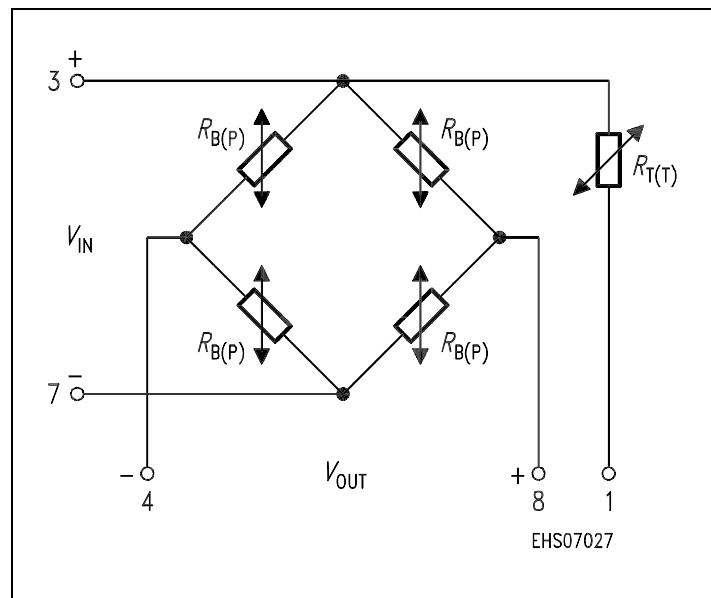


Type and Marking	Symbol	Pressure Range	Unit	Ordering Code
KPY 62 AG	$P_0 \dots P_N$	0 ... 0.6	bar	Q62705-K... *)
KPY 63 AG		0 ... 1.6		Q62705-K... *)
KPY 64 AG		0 ... 4		Q62705-K... *)
KPY 65 AG		0 ... 10		Q62705-K283

\*) delivery on request

### Pin Configuration

1	Temp.- Sensor (typ. $R_{25} = 2 \text{ k}\Omega$ )
2	Not connected
3	+ $V_{in}$ ; Temp.- Sensor
4	- $V_{out}$
5	No pin
6	Shielding, to be connected to + $V_{in}$
7	- $V_{in}$
8	+ $V_{out}$



## Maximum Ratings

Parameter	Symbol	Value	Unit
Pressure overload KPY 62 AG KPY 63 AG KPY 64 AG KPY 65 AG	$P_{MAX}$	4 8 12 20	bar
Operating temperature range	$T_A$	- 40 ... + 125	°C
Storage temperature range	$T_{stg}$	- 40 ... + 125	°C
Supply voltage	$V_{IN}$	12	V

## Electrical Characteristics

at  $T_A = 25$  °C and  $V_{IN} = 5$  V unless otherwise specified.

Parameter	Symbol	Value			Unit
		min.	typ.	max.	
Bridge resistance	$R_B$	4	-	8	kΩ
Sensitivity KPY 62 AG KPY 63 AG KPY 64 AG KPY 65 AG	$s$	23.3 11.3 6.5 3.6	43.0 20.0 11.0 5.2	73.3 30.0 15.5 8.0	mV/Vbar
Output voltage KPY 62 AG KPY 63 AG KPY 64 AG KPY 65 AG	$V_{fin}$	70 90 130 180	130 160 220 260	220 240 310 400	mV
Offset voltage $P = P_0$	$V_0$	- 25	-	+ 25	mV
Linearity error (Best fit straight line) $P = P_0 \dots P_N$ KPY 62 ... 65 AG	$F_L$	-	± 0.2	± 0.5	% $V_{fin}$
Pressure hysteresis $P_1 = P_0, P_2 = P_N, P_3 = P_0$ KPY 62 ... 65 AG	$P_H$	-	± 0.1	-	% $V_{fin}$

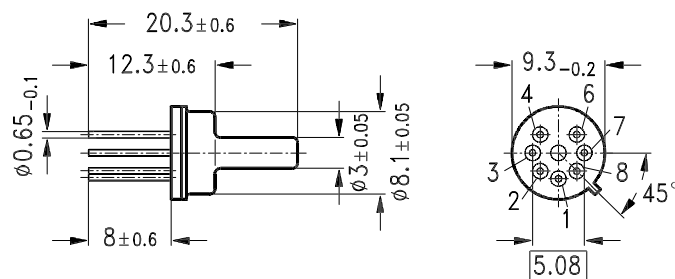
## Electrical Characteristics

at  $T_1 = 25\text{ °C}$ ,  $T_2 = 125\text{ °C}$ ,  $T_3 = 25\text{ °C}$  and  $V_{IN} = 5\text{ V}$ , unless otherwise specified.

Parameter	Symbol	Value			Unit
		min.	typ.	max.	
Temperature coefficient of $V_{fin}$ KPY 62 ... 65 AG	$TC_{V_{fin}}$	- 0.22	- 0.18	- 0.15	%/K
Temperature coefficient of $V_0$ KPY 62 ... 63 AG KPY 64 ... 65 AG	$TC_{V_0}$	- 0.04 - 0.02	-	+ 0.04 + 0.02	%/K
Temperature coefficient of $R_B$ KPY 62 ... 65 AG	$TC_{R_B}$	-	+ 0.23	-	%/K
Temperature hysteresis of $V_0$ ; $V_{fin}$ KPY 62 ... 65 AG	$TH$	-	$\pm 0.2$	-	% v. $V_{fin}$

## Package Outline

### Metal Housing, TO-39



GMT05803

Weight approx. 2.0 g

Dimensions in mm

### Sorts of Packing

Package outlines for tubes, trays etc. are contained in our Data Book "Package Information".