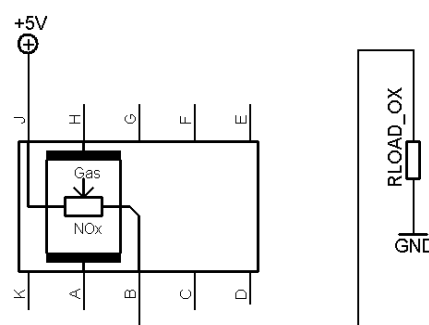


MiCS-2714 with recommended supply circuit (top view)

R is 131 Ω . This resistor is necessary to obtain the right temperature on the heater while using a single 5 V power supply. The resulting voltage is typically $V_H = 1.7$ V.

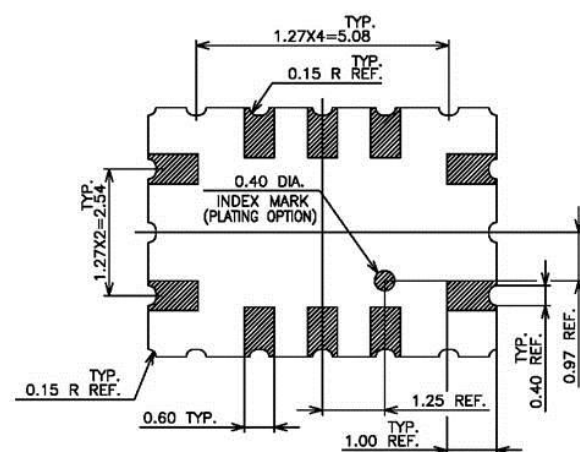
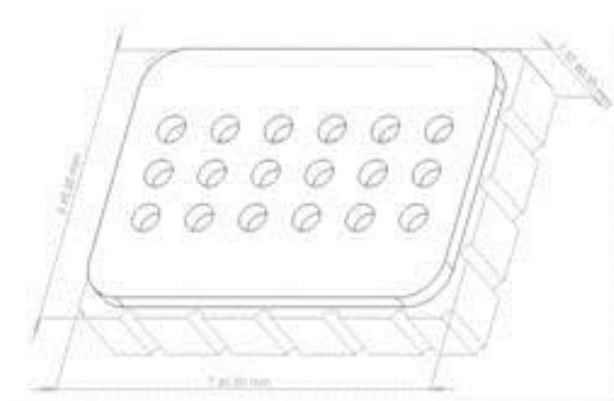


MiCS-2714 with measurement circuit (top view)

The voltage measured on the load resistor is directly linked to the resistance of the sensor. RLOAD must be 820 Ω at the lowest in order not to damage the sensitive layer.

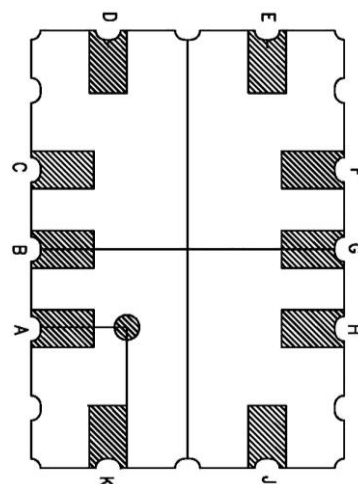
Parameter	Symbol	Typ	Min	Max	Unit
Heating power	P_H	43	30	50	mW
Heating voltage	V_H	1.7	-	-	V
Heating current	I_H	26	-	-	mA
Heating resistance at nominal power	R_H	66	59	73	Ω

Rating	Symbol	Value / Range	Unit
Maximum heater power dissipation	P_H	50	mW
Maximum sensitive layer power dissipation	P_s	8	mW
Voltage supplyHeating current	V_{supply}	4.9 – 5.1	V
Relative humidity range	RH	5 – 95	%RH
Ambient operating temperature	T_{amb}	-30 – 85	$^{\circ}\text{C}$
Storage temperature range	T_{sto}	-40 – 120	$^{\circ}\text{C}$
Storage humidity range	RHsto	5 - 95	%RH



The package is compatible with SMD assembly process.

Pin	Connection
A	Rh1
B	Rs1
C	
D	
E	
F	
G	
H	Rh2
J	Rs2
K	



MiCS-2714 configuration (bottom view)

The silicon gas sensor structure consists of an accurately micro machined diaphragm with an embedded heating resistor and the sensing layer on top. The internal connections are shown above.