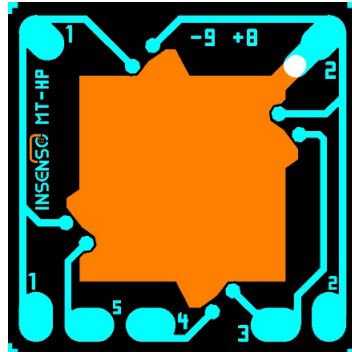


IPD35 SERIES - Mobility Technology

Absolute and gage silicon pressure sense dies



Key Features

- Secondary passivation for increased robustness
- High reliability and stability
- Low pressure and temperature hysteresis
- Fast response
- High impedance bridge
- Pressure proportional output signal
- Cost efficient through compact size

Applications

- Automotive applications
- Industrial controls
- Medical instrumentations
- HVAC applications
- Encapsulated pressure sensors
- Board level pressure sensors

Media

- Dry air
- Oil filled transmitters
- Non-corrosive gases
- Vacuum applications

Technology

- Piezo resistive Wheatstone bridge utilized with glass backplate

Shipping

- Wafers on tape and frame
- Waffle pack on request for samples

Specification

Parameter	Range	Min.	Typ.	Max.	Unit
Electric and environmental					
Bridge resistance	All	5.0	5.5	6.0	kOhm
Supply voltage	All		5	12	V
Operating Temperature	All	-40		+150	°C
Storage Temperature	All	-50		+150	
Temperature coefficient^{a)}					
Offset	All	-0.04	±0.02	+0.08	%FSS/K
Output span	All	-0.23	-0.20	-0.17	
Bridge resistance	All	+0.27	+0.31	+0.35	%/K
Performance^{b)}					
Offset	All	-25	0	+25	mV@5V
Non-linearity ^{c)}	All	-0.5	±0.3	+0.5	%FSS
Pressure repeatability	All	-0.05	±0.02	+0.05	
Temperature hysteresis ^{d)}	All	-0.1	±0.05	+0.1	%FSS/year
Long-term stability	All	-0.15	±0.05	+0.15	
Full scale output					
IPD35-HP-xxx001B	1bar	45	90	155	mV@5V
IPD35-HP-xxx2.5B	2.5bar	60	100	140	
IPD35-HP-xxx004B	4bar	60	100	140	
IPD35-HP-xxx010B	10bar	60	100	140	
IPD35-HP-xxx025B	25bar	60	100	140	
Customized	Cust.		Cust.		

a) 25°...85°C

b) Parameters are significantly impacted by the packaging.

c) End point straight line. 0.9...+0.9 %FSS for IPD35-HPxxx001B

d) 25°...125°...25°C

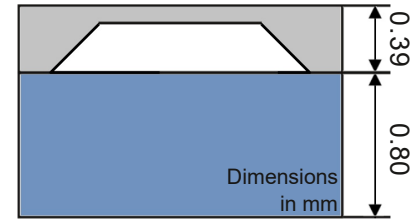
IPD35 SERIES - Mobility Technology

Absolute and gage silicon pressure sense dies

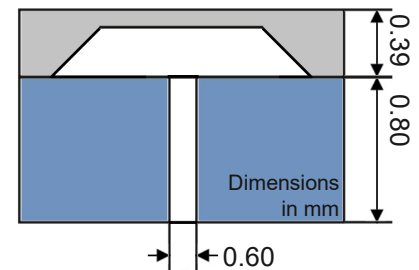


Options

IPD35-HP-08Axxxx



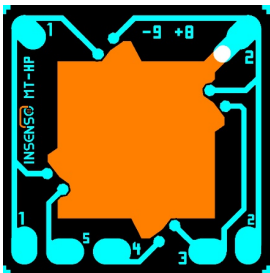
IPD35-HP-08Gxxxx



Parameter	Range	Min. from front side	Min. from rear side	Unit
Overload and burst pressure				
IPD35-HP-xxx001B	1bar	>15	>10	bar
IPD35-HP-xxx2.5B	2.5bar	>25	>20	
IPD35-HP-xxx004B	4bar	>40	>20	
IPD35-HP-xxx010B	10bar	>60	>40	
IPD35-HP-xxx025B	25bar	>75	60	
Customized	Cust.	Cust.	Cust.	

Die Layout and Size

High Pressure (HP)

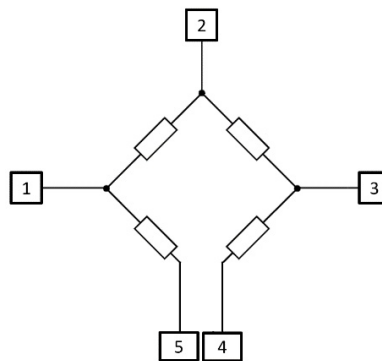


1.65 x 1.65 mm

Electrical Connection

Bondpad Signal

Output	
1	-Vout
2	+Vsupply/substrate
3	+Vout
4	-Vsupply
5	-Vsupply



Ordering Code

