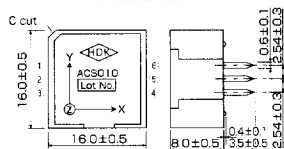




3 Axis Acceleration Sensors

■ ACS010

ACS010

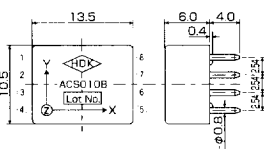


Pin Arrangements

- ① GND
② NC
③ NC
④ X
⑤ Y
⑥ Z
⑦ YOUT
⑧ NC
⑨ XOUT
⑩ ZOUT

Weight : 5.3g

ACS010B



Pin Arrangements

- ① GND
② NC
③ NC
④ X
⑤ Y
⑥ Z
⑦ YOUT
⑧ NC
⑨ XOUT
⑩ ZOUT

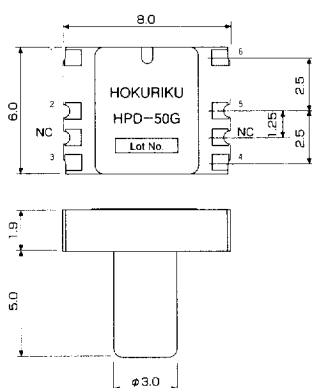
Weight : 2.2g

Item	ACS 010	ACS 010B	Unit
Conditions of Usage			
Storage Temp. Range	-20 ~ +60	-20 ~ +60	℃
Working Temp. Range	0 ~ +40	0 ~ +40	℃
Acceleration Detecting Range	±10	±10	G Max.
Temp. of Soldering*	Max. 230	Max. 230	℃
Shock	1000	1000	G
Electrical Characteristics (Ta=25℃)			
Sensitivity of Acceleration Detection	X	21.0±25%	mV/G
	Y	21.0±25%	
	Z	14.5±25%	
Linearity of Sensitivity	±5	±5	%FS
Sensitivity Ratio to other axes	±30	±20	%

*Max. 5 sec. Reflow shall not be used.

Pressure Sensor

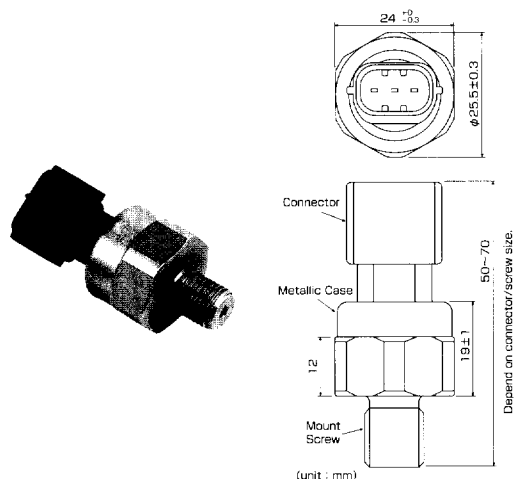
■ HPD-50G



Item	HPD-50G	Unit	Item	HPD-50G	Unit
Rating and Operating Conditions			Electrical Performance (Icc=0.5mA, Ta=25℃)		
Rated Pressure	50(0.51)	kPa (kg/cm ²)	Output Span Voltage	40~100	mV
Drive Current (Constant Current)	0.5	mA	Offset Voltage	±10	mV
Type of Pressure	Gauge Pressure		Bridge Resistance	7000~10000	Ω
Pressure Medium	Noncorrosive gas		Linearity	±0.3	%FS
Max. Rating			Pressure and Hysteresis	±0.7	%FS
Max. Pressure	100(1.02)	kPa (kg/cm ²)	Temp. Characteristics		
Max. Current	I	mA	Offset Voltage	±5	%FS
Operating Temp. Range	-30 ~ +70	℃	Span Voltage	±2.5	%FS
Storage Temp. Range	-40 ~ +80	℃			

*Temperature characteristics are measured from 0 to 50℃.

Capacitive Pressure(CP) Sensor



Item	Symbol	Specifications	Unit	Remarks
Rated Pressure Range	Pin	1, 1.5, 3	MPa	Three left types are standard.
Proof Pressure	Ppr	Pin × 1.5	MPa	To be applied for 10 minutes Max.
Operating Temperature	Ta	-30 ~ +120	℃	
Storage Temperature	Ts	-40 ~ +130	℃	
Supply Voltage	Vin	4.5~5.5	V	
Withstanding Voltage	Ve	7(Max.)	V	
Output Voltage Range	Vout	0.5~4.5 (Vin=5V)	V	
Accuracy (-30~120℃)		±3.0 (±2.0 by special order)	%SPAN	Including linearity, temp. characteristics, hysteresis.
Ratiometricity Error		±2.0	%/V	
Output Load	RL	50(Min.) 5(Min.)	kΩ kΩ	When applied with a pull-down load When applied with a pull-up load
Supply Current	Ic	12(Max.)	mA	

(Ordering Information) HCP-1.5-M

① Rated pressure

Mark	Pressure
1	1MPa
1.5	1.5MPa
3	3MPa

② Pressure Medium

M: Mineral oil
R: Refrigeration medium
A: Air

Dew Sensors

■ HDP-05



■ HDP-07



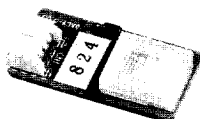
Element Size(mm)	Item	Applications
HDP-05 (W) (L) (t) 6×8×0.64	Working Voltage : AC, DC 0.8V Max. Working Temperature Range : -10 ~ 60℃ Working Humidity Range : 0 ~ 100%RH Response Within 10 sec. { HDP-05 100kΩ Min. HDP-07 200kΩ Min.	VCR, Camera, Duplicator, etc.
HDP-07-A (W) (L) (t) 5.2×5.2×0.64	Resistance	
	75%RH 93%RH 100%RH	
	HDP-05 10kΩ Max. 80kΩ Max. 100kΩ Min.	
	HDP-07 20kΩ Max. 100kΩ Max. 200kΩ Min.	

Humidity Sensors

■ HIS-02-E



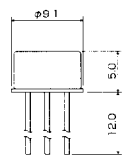
■ HSU-03-17



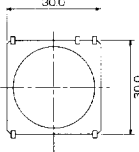
Dimensions(mm)	Item	Applications
HIS-02-E (W) (L) (t) 11.8×14.5×4.5	Working Temp. Range ; -20~60℃ Working Humidity Range ; 20~90% RH Impedance ; 55kΩ (50±5%RH) Rated Voltage AC1V Sine wave and rectangular wave (Duty 1 : 1) Recommended Frequency 1kHz	Airconditioner, Dehumidifier, Humidifier, Fan Heater, Medical instruments, Printer, Duplicator, Warehouse, Greenhouse, etc.
HSU-03-17 (W) (L) (t) 18.0×34.0×10 Max.	Working Temp. Range ; -20~60℃ Working Humidity Range ; 20~90% RH Detective Output Voltage ; 40%RH : DC1.520V 60%RH : DC2.140V Rated Voltage ; DC5V±5%	

Pyroelectric Infrared Sensors

■ PYS



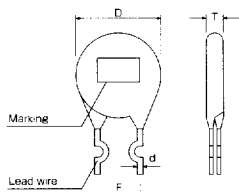
■ PYU



Type	Item	Applications
Sensors PYS Series	VSUP DC3.0~15.0V TOPR -25~+70℃ TSTG -40~+100℃ Rv 1200V/W Balance 10% Max. Package TO-5	Automatic door Light control Intruder alarm Visitor detection Toilet flush Auto ventilation Toy
Sensor units (with Fresnel lens) PYU Series	VSUP DC5.0V TOPR -20~+60℃ No dew drops to be produced. TSTG -30~+70℃ No dew drops to be produced. Output open collector Gain 54~68dB Timer 0~3 minutes. To be attached separately	

PTC Thermistors

■ Lead Type



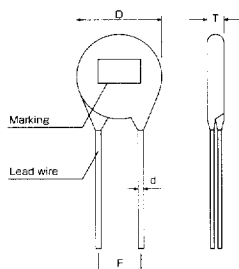
For Overcurrent Protection

Part No.	Initial Characteristics						Dimensions			
	Resistance R ₂₅		Max. Rated Voltage (V)	Max. Current (A)	Operating Current		Non-operating Current		D (mm) Max.	T (mm) Max.
	(Ω)	(%)			Temp. (℃)	Current (mA)	Temp. (℃)	Current (mA)		
PCR-R55M100-15 □□□□	0.55	±20	DC 16	5.0	25	2000	25	700	18.0	5.0
PCR-3R9M120-07 □□□□	3.9	±20	DC 35	1.5	25	480	25	290	9.6	3.5
PCR-100M120-05 □□□□	10.0	±20	DC 35	0.9	25	280	25	170	7.4	3.5
PCR-3R9M120-12 □□□□	3.9	±20	DC 56	1.5	-10	800	60	340	13.0	5.0
PCR-090M120-12 □□□□	9.0	±20	DC 56	2.9	25	405	25	270	12.5	4.0
PCR-250X120-06 □□□□	25.0	±25	DC 80	1.0	25	300	25	110	8.0	4.5
PCR-060X080-15 □□□□	6.0	±25	AC265	4.1	25	350	25	170	18.0	5.5
PCR-100X120-14 □□□□	10.0	±25	AC265	2.2	25	400	25	200	15.5	7.0
PCR-250X120-07 □□□□	25.0	±25	AC265	1.0	25	200	25	100	9.0	7.0

For Overcurrent Protection (UL1459 50A Corresponding Product)

Part No.	Initial Characteristics						Dimensions			
	Resistance R ₂₅		Max. Rated Voltage (V)	Max. Current (A)	Operating Current		Non-operating Current		D (mm) Max.	T (mm) Max.
	(Ω)	(%)			Temp. (℃)	Current (mA)	Temp. (℃)	Current (mA)		
PCR-120N090-12 □□□□	12.0	±30	AC 250	0.6	-10	330	60	90	15.0	6.0
PCR-390N120-09 □□□□	39.0	±30	AC 250	0.6	25	260	50	100	10.0	6.0

For Degaussing Circuit (Lead Type)



Part No.	Initial Characteristics						Dimensions			
	Resistance R ₂₅		Rated Voltage (ACV)	Attenuation (mAp-p)			D (mm) Max.	T (mm) Max.	Lead Wire (mm)	
	(Ω)	(%)		Rush (AP-p)	After 3 sec. (mAp-p)	After 60 sec. (mAp-p)			d	F
PAR-050M050-15 □□	5.0	±20	100	≥25	≤300	≤60	19.0	7.0	φ0.6	7.5
PAR-080M050-14 □□	8.0	±20	120	≥16	≤300	≤60	18.0	7.0	φ0.6	7.5
PAR-180N050-14 □□	18.0	±30	220	≥15	≤300	≤40	18.0	6.8	φ0.6	10.0
PAR-200N050-14 □□	20.0	±30	220	≥15	≤300	≤40	18.5	6.5	φ0.6	10.0
PAR-250N050-12 □□	25.0	±30	220	≥8	≤220	≤50	15.0	7.0	φ0.6	10.0

For Heater

Part No.	Initial Characteristics				Dimensions	
	Resistance R ₂₅	Rated Voltage (V)	Max. Current (A)	Temp. Rise (℃)	D (mm)	T (mm)
	(Ω)					
PFE-100M090-100 □□	10.0	±20	DC 15	1.5	separate spec.	φ10.0
PFE-200M100-100 □□	20.0	±20	DC 15	1.1	separate spec.	φ10.0
Ring Heater			AC100	0.5	separate spec.	separate spec.

※Type No, Characteristics and dimensions in this catalog are for reference only. For details, please inquire at our sales office.