

Si strip detector

S2461 series

DC-coupled single-sided Si strip detector for particle tracking

Features

- Large area
- Low noise
- Low dark current, excellent about bias voltage tolerance
- S2461-01: PWB mount type

Applications

- Tracking detector in high energy physics experiment: collider experiment, fix target experiment
- Charged particle position detection
- X-ray detection

Specifications

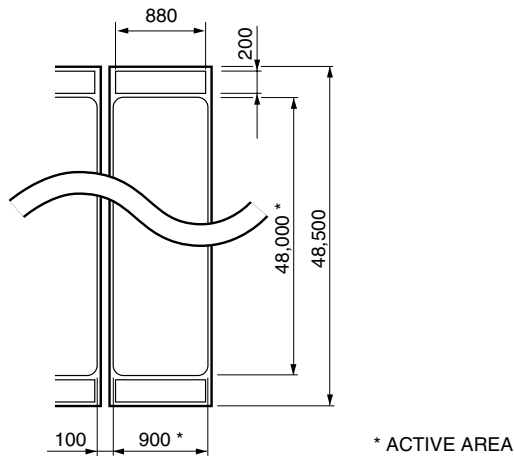
Parameter	S2461	S2461-01	Unit
Chip size	50 × 50		mm
Active area	48 × 48		mm
Thickness	325 ± 15		μm
Rear-side dead layer thickness	20		μm Max.
Readout (bias) method	DC		-
Strip pitch	1000		μm
Number of strips	48		-
Number of readout strips	48		-
Strip width	900		μm
Passivation	Polyimide		-
Supply	Chip only	with PWB	-

Electrical and optical characteristics (Ta=25 °C)

Parameter	Symbol	Condition	S2461			S2461-01			Unit
			Min.	Typ.	Max.	Min.	Typ.	Max.	
Full depletion voltage	V _{fd}		-	-	75	-	-	75	V
Breakdown voltage	V _{BR}		100	-	-	100	-	-	V
Leakage current	-	at V _{fd} , 1 strip	-	-	30	-	-	30	nA
Load capacitance	-	at V _{fd} , f=1 MHz	-	26	-	-	27	-	pF
Number of NG channel	-		-	-	0	-	-	0	-

■ Details of active area (unit: μm)

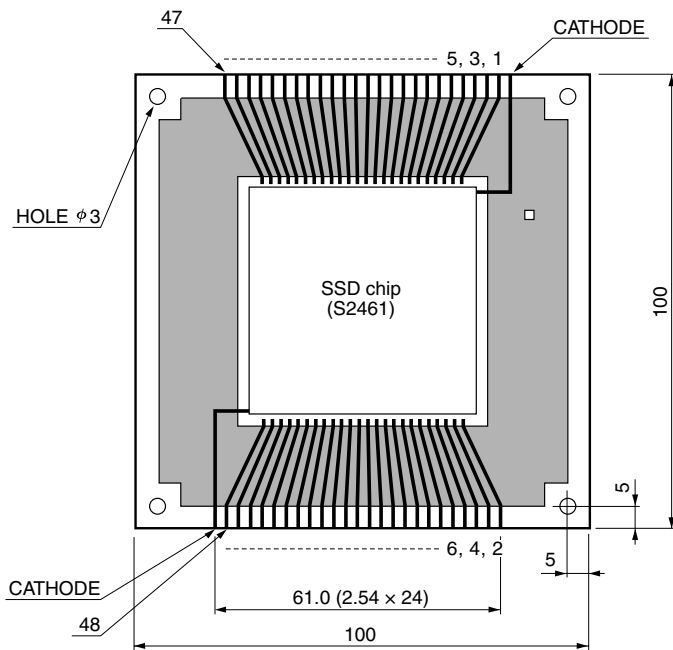
S2461



KSPDA0025EA

■ Dimensional outline (unit: mm)

S2461-01 (S2461 with PWB)



KSPDA0027EA

HAMAMATSU

HAMAMATSU PHOTONICS K.K., Solid State Division

1126-1 Ichino-cho, Hamamatsu City, 435-8558 Japan, Telephone: (81) 053-434-3311, Fax: (81) 053-434-5184, <http://www.hamamatsu.com>

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, P.O.Box 6910, Bridgewater, N.J. 08807-0910, U.S.A., Telephone: (1) 908-231-0960, Fax: (1) 908-231-1218

Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49) 08152-3750, Fax: (49) 08152-2658

France: Hamamatsu Photonics France S.A.R.L.: 8, Rue du Saule Trappu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: 33-(1) 69 53 71 00, Fax: 33-(1) 69 53 71 10

United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, 10 Tewin Road, Welwyn Garden City, Hertfordshire AL7 1BW, United Kingdom, Telephone: (44) 1707-294888, Fax: (44) 1707-325777

North Europe: Hamamatsu Photonics Norden AB: Smidesvägen 12, SE-171 41 Solna, Sweden, Telephone: (46) 8-509-031-00, Fax: (46) 8-509-031-01

Italy: Hamamatsu Photonics Italia S.R.L.: Strada della Moia, 1/E, 20020 Arese, (Milano), Italy, Telephone: (39) 02-935-81-733, Fax: (39) 02-935-81-741

Information furnished by HAMAMATSU is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications are subject to change without notice. No patent rights are granted to any of the circuits described herein. ©2001 Hamamatsu Photonics K.K.