

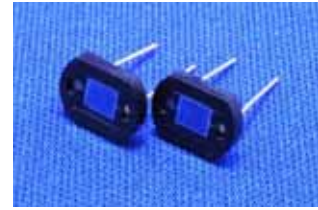
**Silicon Photo Diodes**

**Model No. SD-7BA**

Optoelectronic device

**Features**

- Wide range from the visible light to near-infrared light
- High spectral sensitivity
- Suitable for automatic controllers, spectrometers, and others
- High reliability



**Absolute Maximum Ratings**

Ta = 25

Parameter	Symbol	Value	Unit
DC Reverse Voltage	V <sub>R</sub>	20	V
Operating Temperature	Topr	-20 ~ +60	
Storage Temperature	Tstg	-25 ~ +80	

**Electro-optical Characteristics**

Ta = 25

Parameter	Symbol	MIN	TYP	MAX	Unit	Condition
Sensitive Range		320		1150	nm	Equivalent energy
Peak sensitive wavelength	P		870		nm	Equivalent energy
Short Circuit Current	I <sub>sc</sub>	4.5	5.5	6.5	μA	100Lx
Dark current	I <sub>d</sub>			30	pA	V <sub>R</sub> =1V. RH 65%
Shortcircuit current temp. coefficient	τ		0.2	0.3	%/	100Lx
Dark current temp. coefficient	τ		4	5	Times/10	V <sub>R</sub> =1V. RH 65%
Terminal capacitance	C <sub>T</sub>	600	680	750	pF	V <sub>R</sub> =0V, f=1MHz
Spectral sensitivity	IR		--	--	%	=700nm, I <sub>sc</sub> ratio

**External Dimension (unit: mm)**

Technical drawing showing external dimensions (unit: mm) for the SD-7BA photo diode. The drawing includes a top view and a side view. Key dimensions include: overall diameter 8.0 (+0/-0.25), lead diameter 0.45, lead length 9.0 (+1.0/-0.15), and active area diameter 5.0 (+0/-0.2). Labels indicate Anode, Cathode, Resin, and Active area: 5.92mm<sup>2</sup>. The package is identified as Ceramic.