

CENTRONIC

TECHNICAL DATA SHEET

CdS CdSe

PHOTOCONDUCTIVE CELLS

Designation of Type Number

CST — 7 — II — 2 — 6 — $\gamma\%$ = $\frac{\log R_1 - \log R_{10}}{\log I_{10} - \log I_1}$
 EXAMPLE Type Size Housing Resistance γ Value

Features

Type	Material	nm (λ P)	Characteristics
CSY	CdS	560	High sensitivity Visible response
CSP	CdS	550	High stability, High power
CST	CdS, CdSe	600	High sensitivity, High speed
CSB	CdSe	680	High speed, Near Infra red response

Housing

Indication	Housing	Ambient temp. range
II	Hermetically sealed metal cap	-30 ~ +70°C
R	Plastic case	-30 ~ +60°C
C	Plastic coated	-30 ~ +70°C

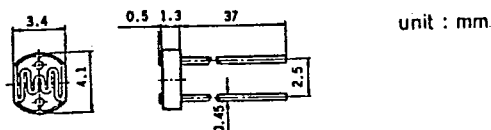
CENTRONIC INC.

E-O Division

1829-B DeHavilland Dr. • Newbury Park, California 91320-1702 • (805) 499-5902 • FAX: (805) 499-7770

 **Morgan**
ELECTRONICS DIVISION

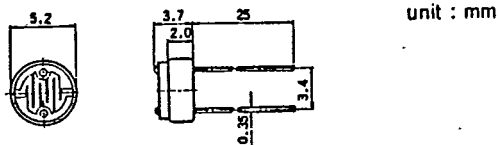
43C SERIES



unit : mm

	10 Lux (K Ω)	MIN (M Ω)	25°C (mW)	DC (V)
CSP -43C79	100~200	20	30	100
CST -43C49	10~20	0.5	30	100

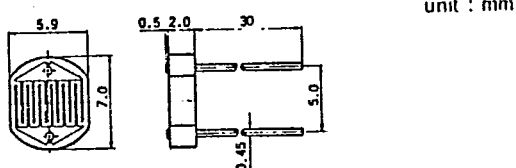
5C SERIES



unit : mm

CSY -5C38E	3 ~ 12	0.3	30	150
CSY -5C46	10 ~ 20	0.2	30	100
CSP -5C69	50 ~ 100	20	60	200
CSP -5C79	100 ~ 200	30	60	200

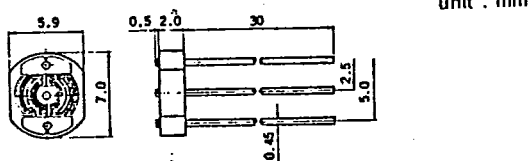
76C SERIES



unit : mm

CSY -76C348	3 ~ 20	0.5	50	150
CSP -76C59	20 ~ 50	20	100	200
CSP -76C569	20 ~ 100	20	100	200
CST -76C49	10 ~ 20	5	80	200

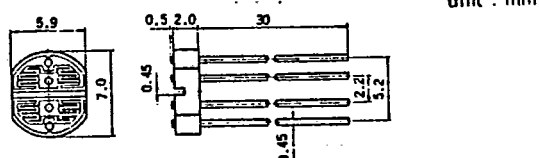
76CP SERIES DUAL ELEMENT



unit : mm

CST -76C59P	20 ~ 50	5	40	150
CSB -76C60P	50 ~ 100	40	20	150

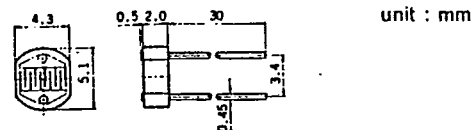
76CF SERIES DUAL ELEMENT



unit : mm

CST -76C59F	20 ~ 50	3	40	150
CSP -76C69F	50 ~ 100	5	40	150
Type No.	10Lux Resistance (K Ω)	Dark Resistance MIN (M Ω) 10sec. after 100Lux	MAX Power Dissipation at 25°C (mW)	MAX Voltage

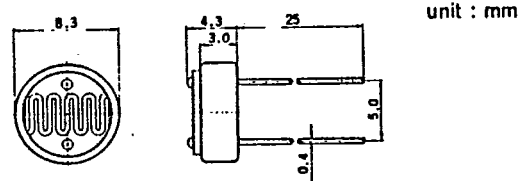
54C SERIES



unit : mm

	10 Lux (K Ω)	MIN (M Ω)	25°C (mW)	DC (V)
CSY -54C348	3 ~ 20	0.5	30	150
CSY -54C46	10 ~ 20	0.2	30	100
CSP -54C69	50 ~ 100	20	60	200
CSP -54C679	50 ~ 200	20	60	200

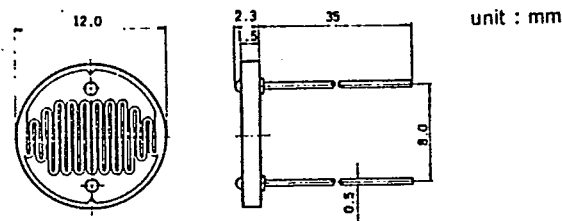
7C SERIES



unit : mm

CSY 7C38E	3 ~ 12	0.3	50	150
CSP 7C59	20 ~ 50	20	100	200
CSP 7C69	50 ~ 100	30	100	200
CST -7C39	5 ~ 10	3	90	200
CST -7C49	10 ~ 20	5	90	200

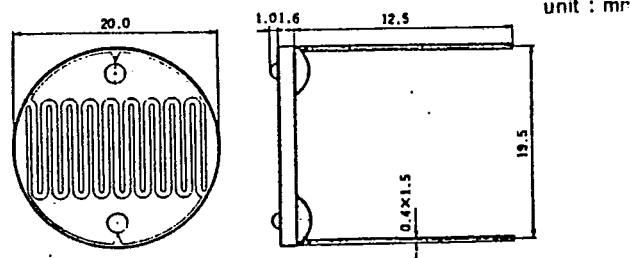
12C SERIES



unit : mm

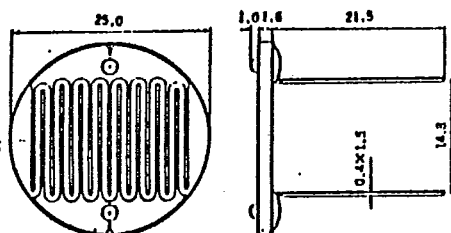
CSP 12C28	2 ~ 5	1	125	200
CSP -12C38	5 ~ 10	2	125	200
CSP -12C49	10 ~ 20	5	150	200
CST -12C49	10 ~ 20	5	150	200
DUAL ELEMENT CSP 12C38P	5 ~ 10	0.5	50	150

20C SERIES



unit : mm

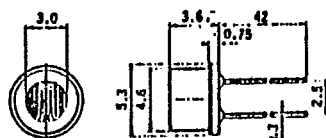
CSP -20C48	10 ~ 20	1	500	1000
CSP -20C59	20 ~ 50	2	500	1000
Type No.	10Lux Resistance (K Ω)	Dark Resistance MIN (M Ω) 10sec. after 100Lux	MAX Power Dissipation at 25°C (mW)	MAX Voltage



unit : mm

	10 Lux (KΩ)	MIN (MΩ)	25°C (mW)	DC (V)
CSP-25C38	5 ~ 10	1	500	500
CSP-25C49	10 ~ 20	2	500	500

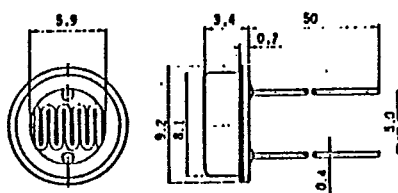
4H SERIES



unit : mm

CSY-41137	5 ~ 10	0.5	30	150
CSY-41148	10 ~ 20	1	30	150
CSP-41169	50 ~ 100	10	40	200
CSP-41179	100 ~ 200	20	40	200
CST-41148	10 ~ 20	5	40	200
CST-41159	20 ~ 50	10	40	200
CSB-41138	5 ~ 10	50	30	150

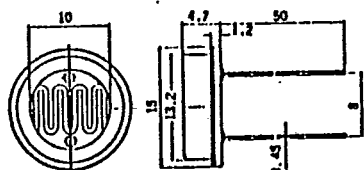
7H(1) SERIES



unit : mm

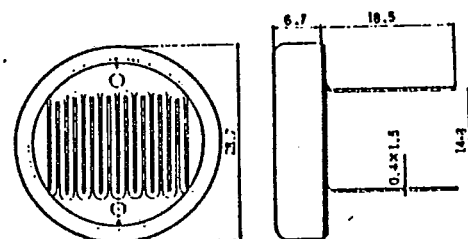
CSY-71126	2 ~ 5	0.1	50	150
CSY-71138	5 ~ 10	0.5	50	150
CSY-71149	10 ~ 20	1	50	150
CSB-71138	5 ~ 10	100	50	150
CSB-71169	50 ~ 100	400	50	300

12H SERIES



unit : mm

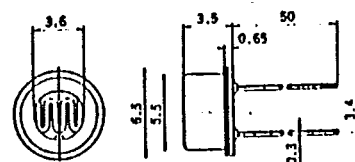
CSP-121128	2 ~ 5	1	200	200
CSP-121139	5 ~ 10	2	300	200
CSP-121149	10 ~ 20	5	300	300
CST-121149	10 ~ 20	10	180	150
Type No.	10Lux Resistance (KΩ)	Dark Resistance MIN (MΩ) 10sec. after 1001.ux	MAX Power Dissipation at 25°C (mW)	MAX Voltage



unit : mm

	10 Lux (KΩ)	MIN (MΩ)	25°C (mW)	DC (V)
CSP-25R38	5 ~ 10	1	500	500
CSP-25R49	10 ~ 20	2	500	500

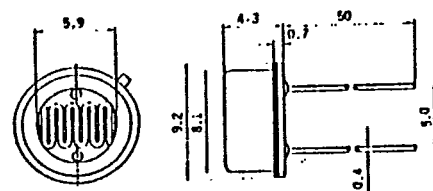
5H SERIES



unit : mm

CSY-51126	2 ~ 5	0.1	40	100
CSY-51138	5 ~ 10	0.5	40	150
CSY-51149	10 ~ 20	1	40	150
CSP-51169	50 ~ 100	20	70	200
CSP-51179	100 ~ 200	30	70	200
CST-51149	10 ~ 20	5	70	200
CST-51159	20 ~ 50	10	70	200
CSB-51138	5 ~ 10	100	40	150
CSB-51169	50 ~ 100	300	40	200

7H(2) SERIES

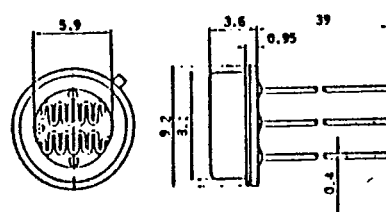


unit : mm

CSP-71159	20 ~ 50	20	120	200
CSP-71169	50 ~ 100	30	120	200
CST-71139	5 ~ 10	5	120	200
CST-71149	10 ~ 20	10	120	200

7HP SERIES

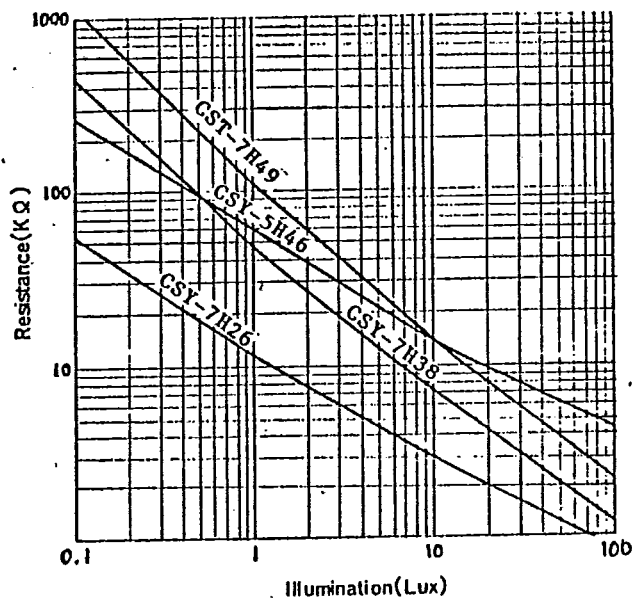
DUAL ELEMENT



unit : mm

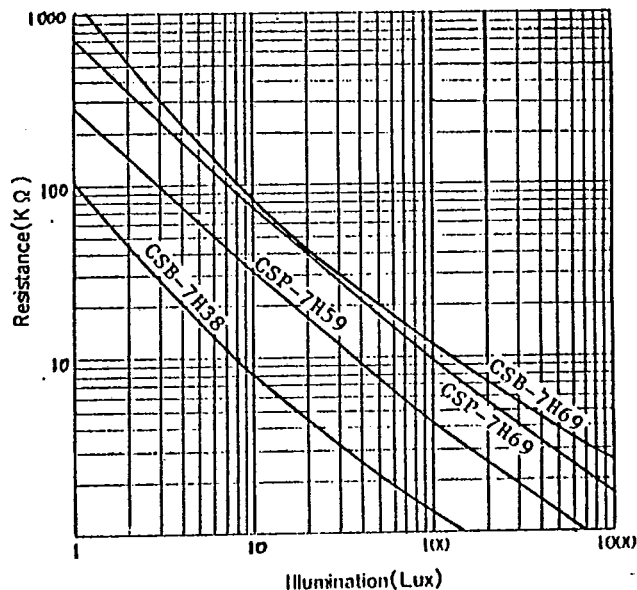
CSB-711791'	100 ~ 200	10	60	150
CSP-711281'	2 ~ 6	1.5	40	150
Type No.	10Lux Resistance (KΩ)	Dark Resistance MIN (MΩ) 10sec after 1001.ux	MAX Power Dissipation at 25°C (mW)	MAX Voltage

Fig 1



Spectral Response (1)

Fig 2



Spectral Response (2)

Fig 3

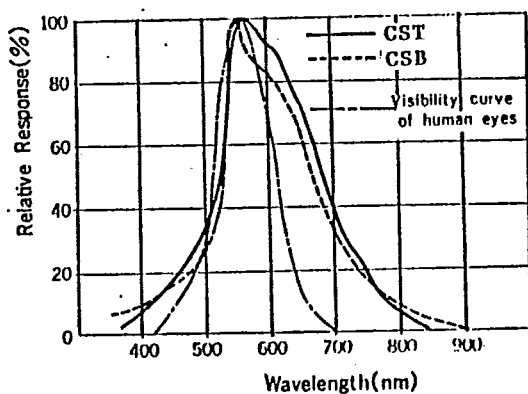


Fig 4

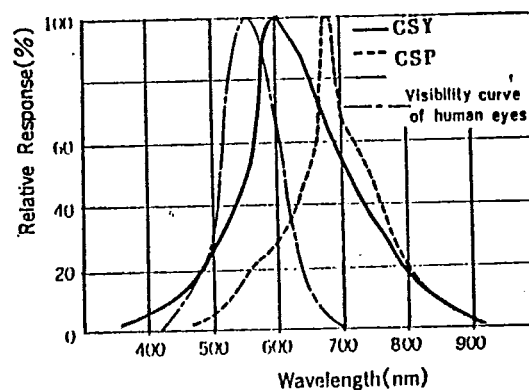


Fig 5 Temperature coefficient (1)

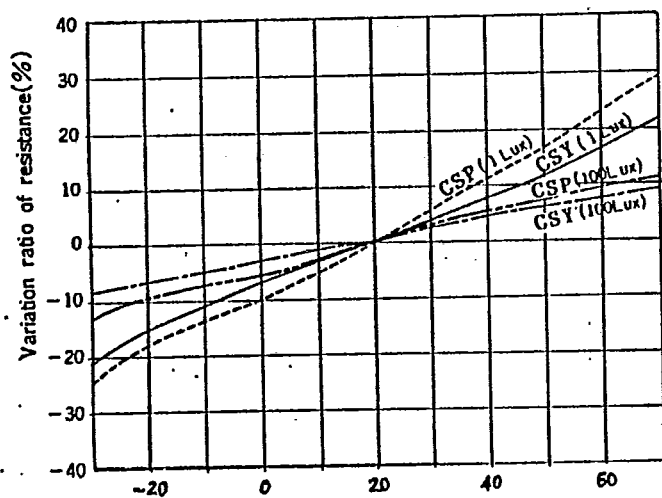
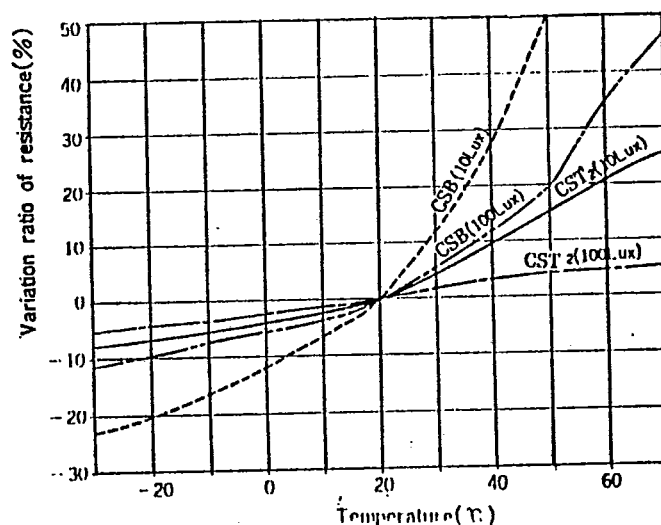


Fig 6 Temperature coefficient (2)



Test Circuit for
Response Time

Response Time (Typ.)

Fig7

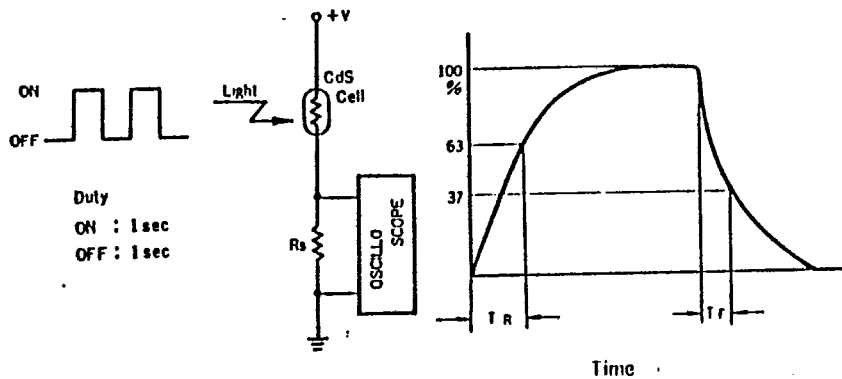


Fig8

TYPE	10Lux		100Lux	
	T_R 63%	T_F 37%	T_R 63%	T_F 37%
CSY-7H49	ms 40	ms 15	ms 20	ms 7
CSP-7H59	40	10	15	4
CST-7H49	20	7	7	4
CSD-7H39	30	7	10	5

$$R_S \leq R_{cds}/100$$

Response time vs.
Load ResistanceDerating Curve of
Power Dissipation

Fig9

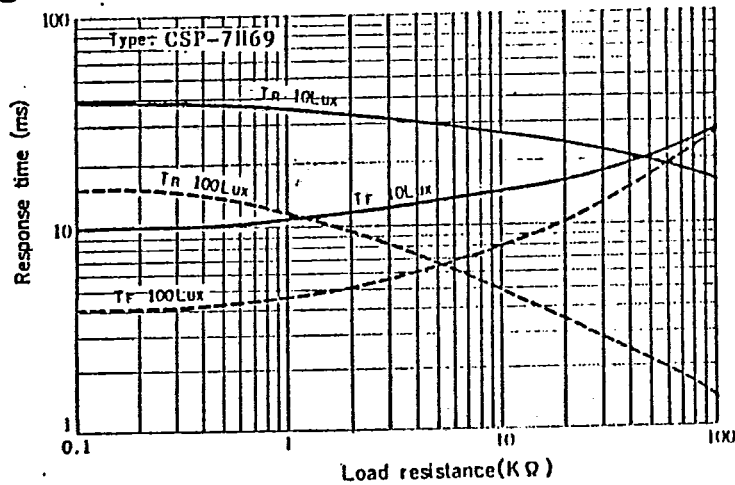
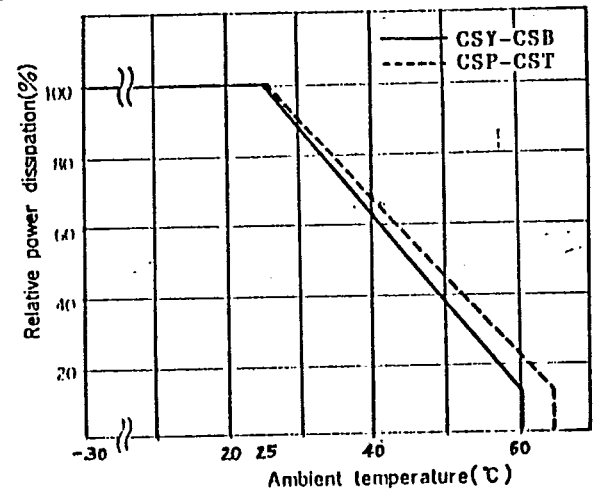


Fig10



Humidity Test

Life Test

Fig11

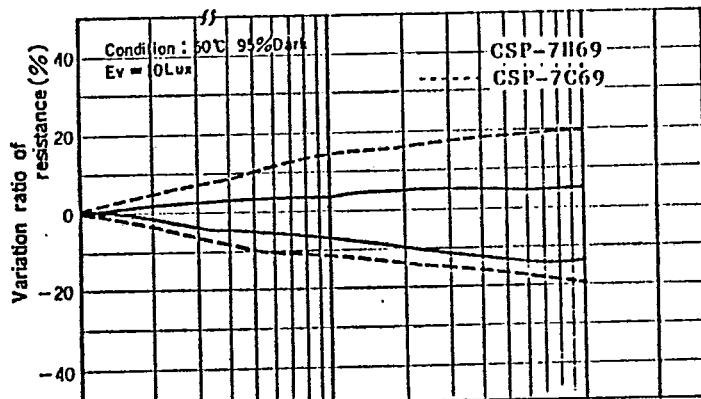


Fig12

