

SONY**1T339****CD Optical Pickup Photodiode**

T-41-53

Description

1T339 is a photodiode developed for use as a light receiving element for CD optical pickup and is adaptable for the astigmatism focus servo and 3-spot tracking servo systems.

Structure

Silicon PIN photodiode.

Applications

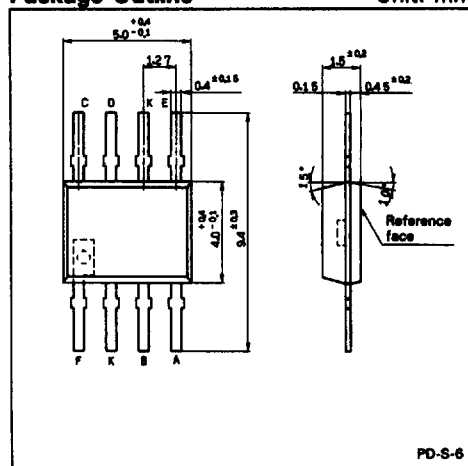
CD optical pickup.

Absolute Maximum Ratings (Ta=25°C)

- Peak reverse voltage V_R 30 V
- Junction temperature T_j 100 °C
- Storage temperature T_{stg} -40 to +100 °C

Package Outline

Unit: mm

**Electrical Characteristics**

Ta = 25°C

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F = 10 \text{ mA}$			1.2	V
Dark current	I_D	$V_R = 15 \text{ V}$			4.0	nA
Inter-pin capacitance	C1	$V_R = 15 \text{ V}$, $f = 1 \text{ MHz}$ Note 1	2.8	3.8	4.8	pF
	C2	$V_R = 15 \text{ V}$, $f = 1 \text{ MHz}$ Note 2	3.4	4.4	5.4	pF
Sensitivity	S	$\lambda = 780 \text{ nm}$	0.40	0.50	0.60	A/W

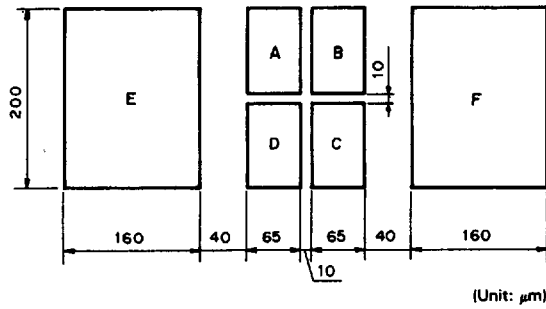
- Note)** 1. Capacitance between each of devices A, B, C, D and cathode.
2. Capacitance between cathode and device E or F.

SONY

1T339

Acceptance Pattern Diagram

T-41-53



(Unit: μm)

Fig. 1

Pin Wiring and Connection

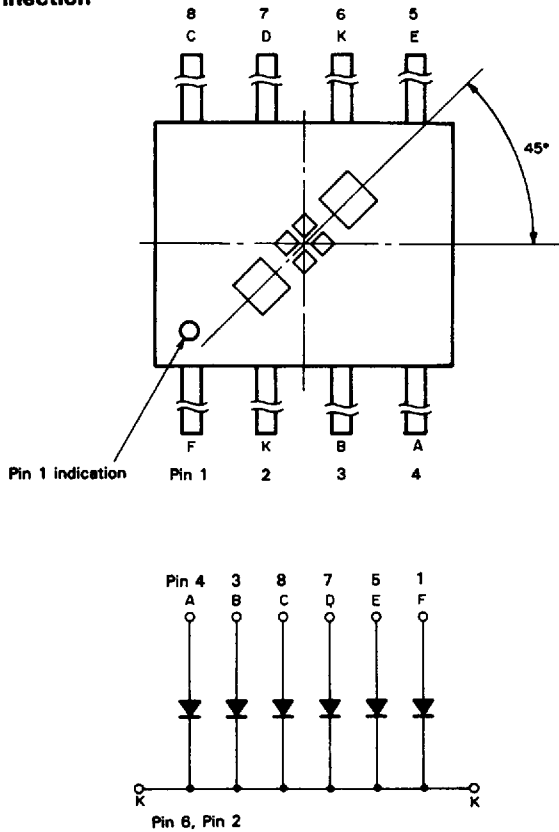


Fig. 2