

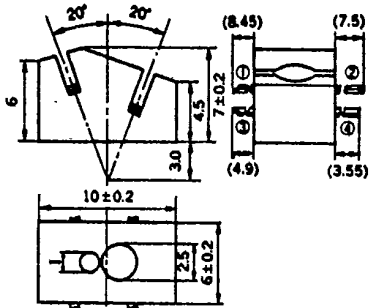
PHOTO SENSOR PS6001A

PHOTO REFLECTIVE SENSER

DESCRIPTION

The PS6001A is a photo reflective senser containing a GaAs light emitting diode and an NPN silicon photo-transistor.

PACKAGE DIMENSIONS (Unit : mm)

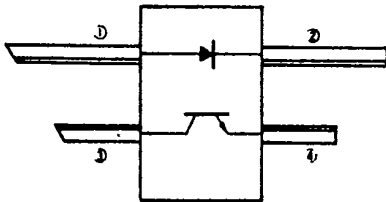


- ⊕ Anode } LED
- ⊖ Cathode } LED
- ⊕ Collector } photo Tr
- ⊖ Emitter } photo Tr

ABSOLUTE MAXIMUM RATINGS (T_a = 25 °C)

Diode			
Reverse Voltage	V _R	3	V
Forward Current	I _F	50	mA
Power Dissipation	P _C	75	mW
Transistor			
Collector to Emitter Voltage	V _{CEO}	30	V
Collector Current	I _C	40	mA
Power Dissipation	P _C	100	mW
Junction Temperature	T _J	80	°C
Storage Temperature	T _{stg}	-30 to +80	°C

TERMINAL CONNECTION (Top View)

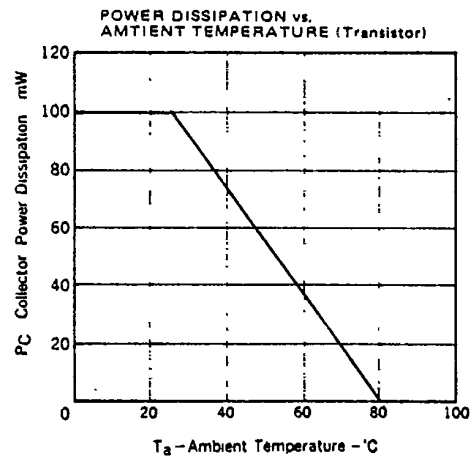
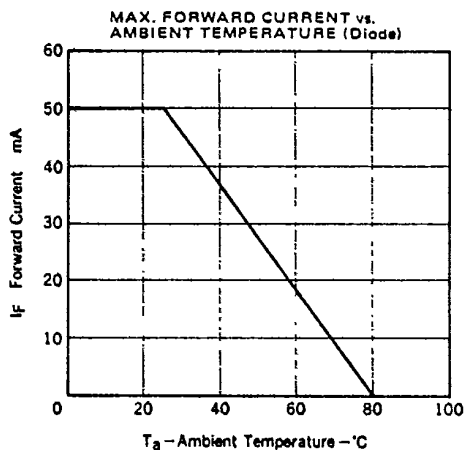


PS6001A

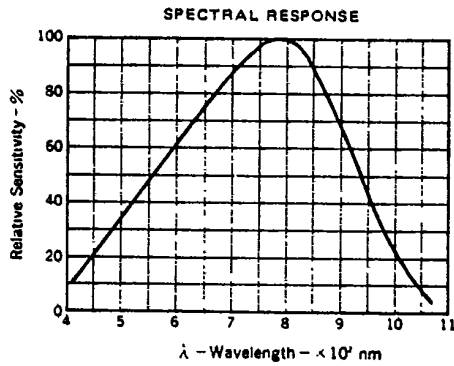
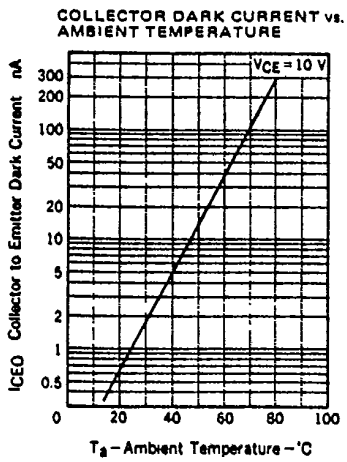
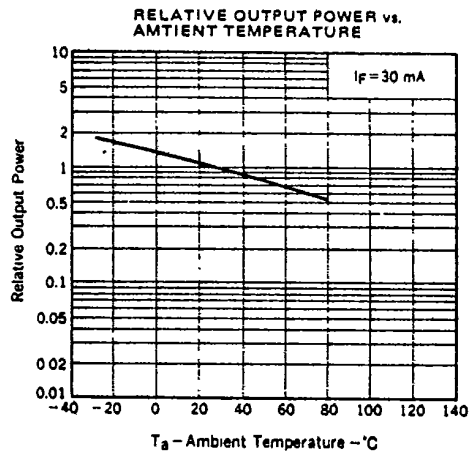
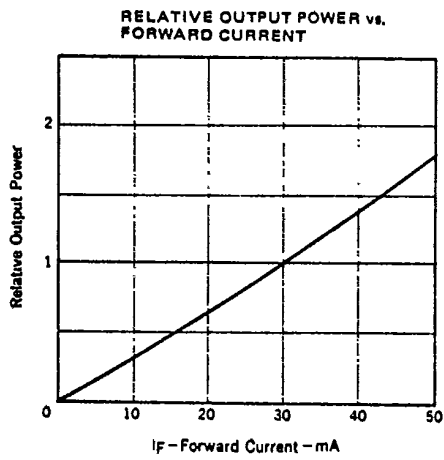
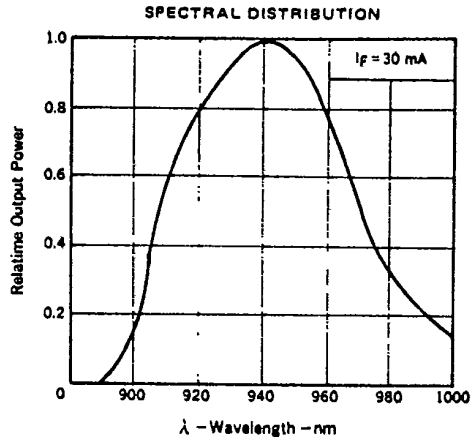
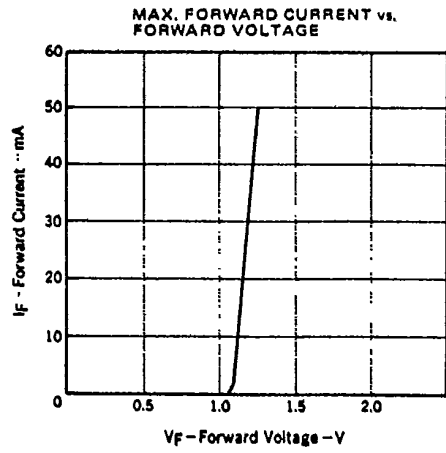
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

CHARACTERISTICS	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Forward Voltage	V_F	$I_F = 30\text{ mA}$		1.2	1.4	V
Reverse Current	I_R	$V_R = 3\text{ V}$			50	μA
Peak Emission Wavelength	λ_{peak}	$I_F = 30\text{ mA}$		940		nm
Collector Saturation Voltage	$V_{CE(\text{sat})}$	$I_C = 20\ \mu\text{A}$			0.3	V
Output Leak Current	I_{leak}	$I_F = 30\text{ mA}, V_{CE} = 5\text{ V}, L = 0\text{ lx}$			1.0	μA
Output Current	I_C		100	200		μA

TYPICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)



PS6001A



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