



DATA SHEET

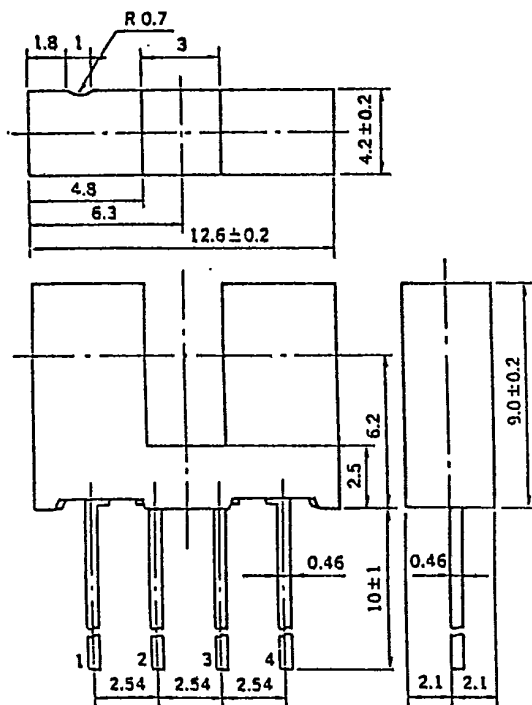
PHOTO INTERRUPTER

PS4652

ONE PIECE PHOTO INTERRUPTER

-NEPOC SERIES-

PACKAGE DIMENSIONS
in millimeters



DESCRIPTION

The PS4652 is the PS4651 with black case. The black case is designed to optimize the ambient light rejection. The electrical characteristics is the same as the PS4651.

FEATURES

- Ultra small package
- Black plastic case provide a light signal to noise ratio in ambient light.
- High output current ($I_C=20\text{mA MIN.}$)
- Single in-line package (4 pin)
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ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$)

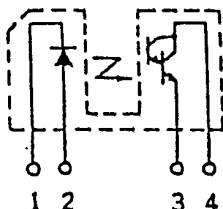
Diode

Reverse Voltage	V_R	5.0	V
Forward Current	I_F	50	mA
Power Dissipation	P_D	100	mW

Transistor

Collector to Emitter Voltage	V_{CEO}	30	V
Collector Current	I_C	40	mA
Power Dissipation	P_C	100	mW
Storage Temperature	T_{STG}	-40 to +100	$^\circ\text{C}$
Operating Temperature	T_{OPT}	-20 to +80	$^\circ\text{C}$

CONNECTION DIAGRAM



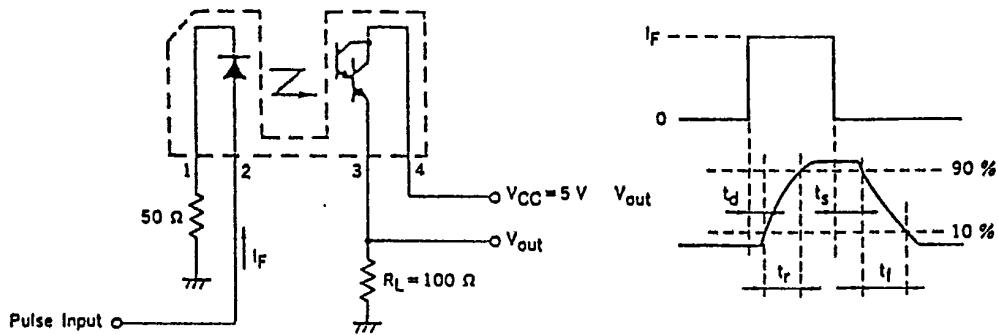
1. Cathode
2. Anode
3. Emitter
4. Collector

PS4652

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Diode	Forward Voltage	V _F		1.1	1.4	V	I _F =10mA
	Reverse Current	I _R			10	μA	V _R =5V
	Junction Capacitance	C		30		pF	V=0, f=1MHz
Transistor	Collector to Emitter Dark Current	I _{CEO}			400	nA	V _{CE} =10V, I _F =0
Coupled	Output Current	I _C	2			mA	I _F =5mA, V _{CE} =2V
	Collector Saturation Voltage	V _{CE(sat)}			1.2	V	I _F =10mA, I _C =2mA
	Collector Leak Current Ratio	I _{leak} /I _c		0.5		%	I _F =5mA, V _{CE} =2V(shielded)
	Rise Time	t _r		20		μs	V _{CC} =5V, I _C =2mA, R _L =100Ω*
	Fall Time	t _f		500		μs	V _{CC} =5V, I _C =2mA, R _L =100Ω*

* Test Circuit for Switching Time



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