

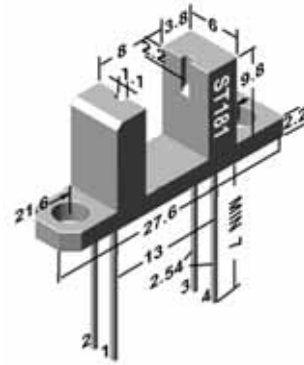
ST181

● Features

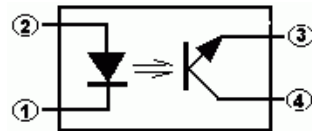
- Combines high output GaAs IRED with high sensitive phototransistor.
- Non-contact detecting manner.
- Slit width(resolution):1.1mm.

● Dimensions Unit:mm

Unless otherwise specified, the tolerances are $\pm 0.2\text{mm}$



Internal Circuit



● Absolute Maximum Ratings(Ta=25°C)

Parameter		Symbol	Rating	Unit
Input	Forward Current	I _F	50	mV
	Reverse Voltage	V _R	6	V
	Power Dissipation	P	75	mW
Output	Collector-Emitter Voltage	V _{CEO}	25	V
	Emitter-Collector Voltage	V _{ECO}	6	V
	Collector Power Dissipation	P _C	50	mW
*Operating Temperature		T _{opr}	-20~65	°C
Storage Temperature		T _{stg}	-30~75	°C
** Soldering Temperature		T _{sol}	260	°C

*The special requirement could be met according to customer's request.

**Soldering time: 5s max. Soldering position: at least 1.5mm from the base of the package.

● Electro-Optical Characteristics (Ta=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Input	Forward Voltage	V _F	I _F =20mA	-	1.25	1.5	V
	Reverse Current	I _R	V _R =3V	-	-	10	μA
Output	Collector Dark Current	I _{CEO}	V _{CE} =20V	-	-	1	μA
	Collector Light Current	I _L	V _{CE} =5V I _F =8mA	0.2	-	-	mA
	Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I _F =8mA I _C =0.15mA	-	-	0.4	V
Transfer Characteristics	Response Time	Rise Time	I _F =20mA V _{CE} =5V R _C =100Ω	-	5	-	μS
		Fall Time		T _f	-	5	-