

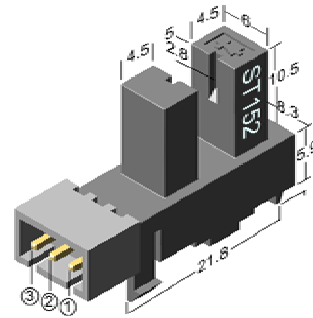
## ST152

### ● Features

- Combines high output GaAs IRED with high sensitive phototransistor.
- Non-contact detecting manner.
- Slit width(resolution): 1mm.

### ● Dimensions Unit:mm

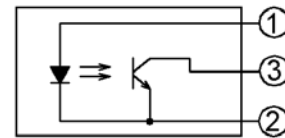
Unless otherwise specified, the tolerances are  $\pm 0.2\text{mm}$



### ● Absolute Maximum Ratings(Ta=25°C)

Parameter		Symbol	Rating	Unit
Input	Forward Current	I <sub>F</sub>	50	mA
	Reverse Voltage	V <sub>R</sub>	6	V
	Power Dissipation	P	75	mW
Output	Collector-Emitter Voltage	V <sub>CEO</sub>	25	V
	Emitter-Collector Voltage	V <sub>ECO</sub>	6	V
	Collector Power Dissipation	P <sub>C</sub>	50	mW
*Operating Temperature		T <sub>opr</sub>	-20~65	°C
Storage Temperature		T <sub>stg</sub>	-30~75	°C
** Soldering Temperature		T <sub>sol</sub>	-	°C

Internal Circuit



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

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

Parameter		Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input	Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	-	1.25	1.5	V
	Reverse Current	I <sub>R</sub>	V <sub>R</sub> =3V	-	-	10	μA
Output	Collector Dark Current	I <sub>CEO</sub>	V <sub>CE</sub> =20V	-	-	1	μA
	Collector Light Current	I <sub>L</sub>	V <sub>CE</sub> =5V I <sub>F</sub> =8mA	0.25	-	-	mA
	Collector-Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	I <sub>F</sub> =8mA I <sub>C</sub> =0.15mA	-	-	0.4	V
Transfer Characteristics	Response Time	Rise Time	T <sub>r</sub>	I <sub>F</sub> =20mA V <sub>CE</sub> =5V	-	5	μs
		Fall Time	T <sub>f</sub>	R <sub>C</sub> =100Ω	-	5	μs