

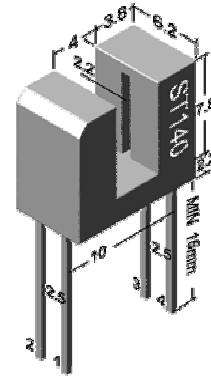
## ST140

### ● Features

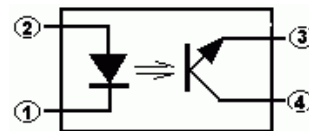
- Combines high output GaAs IRED with high sensitive phototransistor.
- Non-contact detecting manner.
- Slit width(resolution): 0.8mm.

### ● 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	IF	50	mV
	Reverse Voltage	VR	6	V
	Power Dissipation	P	75	mW
Output	Collector-Emitter Voltage	VCEO	25	V
	Emitter-Collector Voltage	VECO	6	V
	Collector Power Dissipation	PC	50	mW
*Operating Temperature		Topr	-20~65	°C
Storage Temperature		Tstg	-30~75	°C
** Soldering Temperature		Tsol	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	Test Condition	Min.	Typ.	Max.	Unit
Input	Forward Voltage	VF	IF=20mA	-	1.25	1.5	V
	Reverse Current	IR	VR=3V	-	-	10	μA
Output	Collector Dark Current	ICEO	VCE=20V	-	-	1	μA
	Collector Light Current	IL	VCE=5V IF=8mA	0.4	-	-	mA
	Collector-Emitter Saturation Voltage	VCE(SAT)	IF=8mA Ic=0.15mA	-	-	0.4	V
Transfer Character-istics	Response Time	Rise Time	IF=20mA VCE=5V RC=100Ω	-	5	-	μS
		Fall Time		Tf	-	5	-