

## IT136H(IT136L)

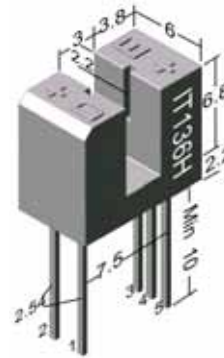
### ● Features

- Single beam, build in amplifier and schmitt trigger.
- Open collector output.
- Resolution: slit width=0.5mm.
- IT136L is low level output type when the gap is not shielded.
- IT136H is high level output type when the gap is not shielded.

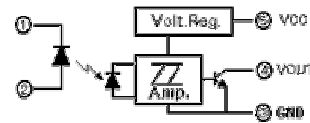
### ● Dimensions

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 <sub>F</sub>	50	mA
	Reverse Voltage	V <sub>R</sub>	5	V
	Power Dissipation	P	75	mW
Output	Power Supply	V <sub>CC</sub>	17	V
	Low Level Current Output	I <sub>OL</sub>	30	mA
	Collector Power Dissipation	P <sub>C</sub>	200	mW
*Operating Temperature		T <sub>opr</sub>	-20~6 5	°C
Storage Temperature		T <sub>stg</sub>	-30~7 5	°C
** Soldering Temperature		T <sub>sol</sub>	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	V <sub>F</sub>	I <sub>F</sub> =10mA	-	1.2	1.4	V
	Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	10	μA
Output	Operating Voltage	V <sub>CC</sub>		4.5	-	16.5	V
	Output Type		NPN transistor open collector output				
	Low Level Output	V <sub>OL</sub>	I <sub>OL</sub> =16mA, V <sub>CC</sub> =5V (IT136L, I <sub>F</sub> =10 mA) (IT136H, I <sub>F</sub> =0)	-	-	0.4	V
	High Level Output	V <sub>OH</sub>	V <sub>CC</sub> =5V, V <sub>OC</sub> ≤25V, R <sub>L</sub> =47K(IT136L, I <sub>F</sub> =0) (IT136H, I <sub>F</sub> =10 mA)	0.9 V <sub>OC</sub>	-	-	V
	Current Consumption	I <sub>CC</sub>	V <sub>CC</sub> =5V	-	3	16	mA
Rise Time		T <sub>r</sub>	R <sub>L</sub> =4.7K	-	8	-	μS
Fall Time		T <sub>f</sub>		-	0.03	-	μS