

IT186H(IT186L)

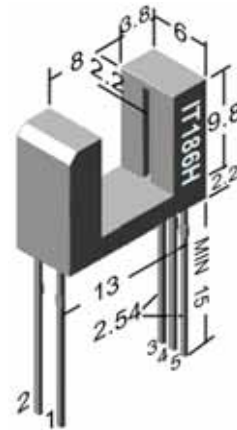
● Features

- Single beam, build in amplifier and schmitt trigger.
- Open collector output.
- Resolution: slit width=0.8mm.
- IT186L is low level output type when the gap is not shielded.
- IT186H is high level output type when the gap is not shielded.

● Dimensions

Unit:mm

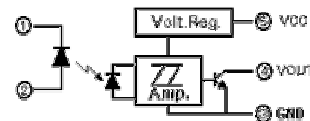
Unless otherwise specified, the tolerances are $\pm 0.2\text{mm}$



● Absolute Maximum Ratings(Ta=25°C)

Parameter		Symbol	Rating	Unit
Input	Forward Current	I _F	50	mA
	Reverse Voltage	V _R	5	V
	Power Dissipation	P	75	mW
Output	Power Supply	V _{CC}	17	V
	Low Level Current Output	I _{OL}	30	mA
	Collector Power Dissipation	P _C	200	mW
*Operating Temperature		T _{opr}	-20~6 5	°C
Storage Temperature		T _{stg}	-30~7 5	°C
** Soldering Temperature		T _{sol}	260	°C

Internal Circuit



*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 _F	I _F =10mA	-	1.2	1.4	V
	Reverse Current	I _R	V _R =5V	-	-	10	μA
Output	Operating Voltage	V _{CC}		4.5	-	16.5	V
	Output Type		NPN transistor open collector output				
	Low Level Output	V _{OL}	I _{OL} =16mA, V _{CC} =5V (IT186L, I _F =10 mA) (IT186H, I _F =0)	-	-	0.4	V
	High Level Output	V _{OH}	V _{CC} =5V, V _{OC} ≤25V, R _L =47K(IT186L, I _F =0) (IT186H, I _F =10 mA)	0.9 V _{OC}	-	-	V
	Current Consumption	I _{CC}	V _{CC} =5V	-	3	16	mA
Rise Time		T _r	R _L =4.7K	-	8	-	μS
Fall Time		T _f		-	0.03	-	μS