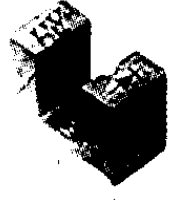

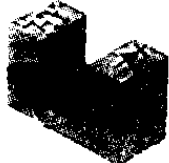
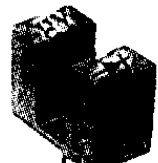




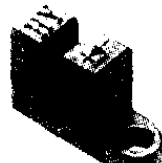


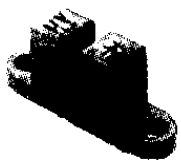










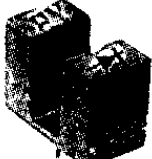











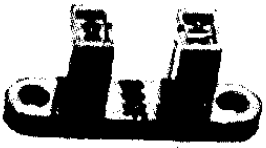





OUTLINE	DEVICE		IREDV <sub>F</sub>	SENSORV <sub>CEO</sub>	SENSORV <sub>CEO</sub>	ICMIN.	PACKAGE DIMENSION
	槽距	PARTNO.	TYF: @I <sub>F</sub> =20mA	MIN. @I <sub>C</sub> =1mA	MIN. IE=100 μ A	@I <sub>F</sub> =20Ma/ V <sub>ce</sub> =5V	
	5.2mm	HY-301A	1.2V	30V	5V	0.5mA	Fig.1-27
	6.0mm	HY-301-05	1.2V	30V	5V	0.5mA	Fig.1-28
	5.0mm	HY-301-07	1.2V	30V	5V	0.4mA	Fig.1-29
	4.1mm	HY-301-19	1.2V	30V	5V	1.5mA	Fig.1-30
	4.0mm	HY-301-21	1.2V	30V	5V	0.4mA	Fig.1-31
	2.7mm	HY-306-01	1.2V	30V	5V	5.0mA	Fig.1-32
	3.0mm	HY-306-02	1.2V	30V	5V	0.5mA	Fig.1-33
	3.2mm	HY870L	1.2V	30V	5V	0.5mA	Fig.1-47
	3.2mm	HY870P	1.2V	30V	5V	0.5mA	Fig.1-48
	3.0mm	HY805	1.2V	30V	5V	0.5mA	Fig.1-34

OUTLINE	DEVICE		IREDV <sub>F</sub>	SENSORV <sub>CEO</sub>	SENSORV <sub>CEO</sub>	ICMIN.	PACKAGE DIMENSION	
	槽距	PARTNO.	TYP. @I <sub>F</sub> =20mA	MIN. @I <sub>C</sub> =1mA	MIN. IE=100μA	@I <sub>F</sub> =20mA/ V <sub>CE</sub> =5V	I <sub>F</sub>	I <sub>C</sub>
	3.2mm	HY860C	1.2V	30V	5V	0.5mA	Fig.1-45	
	4.2mm	HY860D	1.2V	30V	5V	0.5mA	Fig.1-46	
	6.0mm	HY860F	1.2V	30V	5V	0.5mA	Fig.1-47	
	8.0mm	HY860H	1.2V	30V	5V	0.5mA	Fig.1-48	
	3.2mm	HY860N	1.2V	30V	5V	0.5mA	Fig.1-49	
	10mm	HY810H	1.2V	30V	5V	0.5mA	Fig.1-50	
		HY308	1.2V	30V	5V	100uA	Fig.1-51	
	IC mA	HY5000/L	CTR %	IF mA	V <sub>CEO</sub> 1MA	V <sub>CEO</sub> 1V	I <sub>F</sub> mA	I <sub>C</sub> mA
	>0.3		>1.5	20	>32	<0.3	20	0.1
	IC mA	HY70	CTR %	IF mA	V <sub>CEO</sub> 1MA	V <sub>CEO</sub> 1V	I <sub>F</sub> mA	I <sub>C</sub> mA
	>0.3		>1.5	20	>32	<0.3	20	0.1

OUTLINE	DEVICE		IREDV <sub>F</sub>	SENSORV <sub>CEO</sub>	SENSORV <sub>CEO</sub>	ICMIN.	PACKAGE DIMENSION
	槽距	PARTNO.	TYP. @I <sub>F</sub> =20mA	MIN. @I <sub>C</sub> =1mA	MIN. IE=100 μ A	@I <sub>F</sub> =20Ma/ V <sub>ce</sub> =5V	
	5.2mm	HY-301A	1.2V	30V	5V	0.5mA	Fig.1-27
	6.0mm	HY-301-05	1.2V	30V	5V	0.5mA	Fig.1-28
	5.0mm	HY-301-07	1.2V	30V	5V	0.4mA	Fig.1-29
	4.1mm	HY-301-19	1.2V	30V	5V	1.5mA	Fig.1-30
	4.0mm	HY-301-21	1.2V	30V	5V	0.4mA	Fig.1-31
	2.7mm	HY-306-01	1.2V	30V	5V	5.0mA	Fig.1-32
	3.0mm	HY-306-02	1.2V	30V	5V	0.5mA	Fig.1-33
	3.2mm	HY870L	1.2V	30V	5V	0.5mA	Fig.1-47
	3.2mm	HY870P	1.2V	30V	5V	0.5mA	Fig.1-48
	3.0mm	HY805	1.2V	30V	5V	0.5mA	Fig.1-34

OUTLINE	DEVICE		IREDV <sub>F</sub> TYP: @I <sub>F</sub> =20mA	SENSORV <sub>CEO</sub> MIN. @I <sub>C</sub> =1mA	SENSORV <sub>CEO</sub> MIN. IE=100μA	ICMIN. @I <sub>F</sub> =20Ma/ V <sub>ce</sub> =5V	PACKAGE DIMENSION	
	槽距	PARTNO.						
	3.2mm	HY860C	1.2V	30V	5V	0.5mA	Fig.1-45	
	4.2mm	HY860D	1.2V	30V	5V	0.5mA	Fig.1-46	
	6.0mm	HY860F	1.2V	30V	5V	0.5mA	Fig.1-47	
	8.0mm	HY860H	1.2V	30V	5V	0.5mA	Fig.1-48	
	3.2mm	HY860N	1.2V	30V	5V	0.5mA	Fig.1-49	
	10mm	HY810H	1.2V	30V	5V	0.5mA	Fig.1-50	
		HY308	1.2V	30V	5V	100uA	Fig.1-51	
	IC mA	HY5000/L	CTR %	IF mA	V <sub>CEO</sub> 1MA	V <sub>CEO</sub> 1V	I <sub>F</sub> mA	I <sub>C</sub> mA
	>0.3		>1.5	20	>32	<0.3	20	0.1
	IC mA	HY70	CTR %	IF mA	V <sub>CEO</sub> 1MA	V <sub>CEO</sub> 1V	I <sub>F</sub> mA	I <sub>C</sub> mA
	>0.3		>1.5	20	>32	<0.3	20	0.1

# HING YIP ELECTRONIC

## Photointerrupters

Outline	Device		Gap (mm)	Lead Distance (mm)	Slit Width (mm)	Ic Min. @IF=20mA/ VCE=5V(mA)	Package Dimension
	Package	Part No.					
	Slotted Type	HY860C	3.2	8.13	1.2	0.8	Fig.11-8
	Slotted Type	HY860D	4.1	8.3	1.2	0.5	Fig.11-9
	Slotted Type	HY860F	6.0	10.45	1.2	0.5	Fig.11-10
	Slotted Type	HY860H	8.0	12.5	1.2	0.4	Fig.11-11
	Slotted Type	HY860N	3.2	8.13	1.2	0.8	Fig.11-12
	Slotted Type	HY870P	3.2	8.13	1.2	0.8	Fig.11-13
	Slotted Type	HY870L	3.2	8.13	1.2	0.8	Fig.11-14
	Slotted Type	HY805	3.0	8.0	1.2	0.5	Fig.11-15

# HING YIP ELECTRONIC

## Photointerrupters

Outline	Device		Gap (mm)	Lead Distance (mm)	Slit Width (mm)	IcMin. @If=20mA/ VCE=5V(mA)	Package Dimension
	Package	Part No.					
	Slotted Type	HY301A	5.2	9.6	1.2	0.5	Fig.11-1
	Slotted Type	HY301-05	6.0	10.45	1.0	0.5	Fig.11-2
	Slotted Type	HY301-07	5.0	9.0	1.0	0.5	Fig.11-3
	Slotted Type	HY301-19	4.1	8.3	1.2	0.5	Fig.11-4
	Slotted Type	HY301-21	4.0	8.3	1.2	0.5	Fig.11-5
	Slotted Type	HY306-01	2.7	6.7	1.6	4.0	Fig.11-6
	Slotted Type	HY306-02	3.0	9.2	1.0	0.5	Fig.11-7

# HING YIP ELECTRONIC

## Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Part No.	Min.	Typ.	Max.	Unit	Test Condition
<b>Input LED</b>							
Forward Voltage	V <sub>F</sub>			1.2	1.6	V	I <sub>F</sub> =20mA
Reverse Current	I <sub>R</sub>				100	μA	V <sub>R</sub> =5V
<b>Output phototransistor</b>							
Collector Dark Current	I <sub>CEO</sub>				100	nA	V <sub>CE</sub> =10V
<b>Coupler</b>							
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	HY301A			0.4	V	I <sub>c</sub> =0.25mA, I <sub>F</sub> =20mA
		HY301-05			0.4		I <sub>c</sub> =0.25mA, I <sub>F</sub> =20mA
		HY301-07			0.4		I <sub>c</sub> =0.25mA, I <sub>F</sub> =20mA
		HY301-19			0.4		I <sub>c</sub> =0.25mA, I <sub>F</sub> =20mA
		HY301-21			0.4		I <sub>c</sub> =0.25mA, I <sub>F</sub> =20mA
		HY306-01			0.4		I <sub>c</sub> =2.50mA, I <sub>F</sub> =20mA
		HY306-02			0.4		I <sub>c</sub> =0.25mA, I <sub>F</sub> =20mA
		HY860C			0.4		I <sub>c</sub> =0.25mA, I <sub>F</sub> =20mA
		HY860D			0.4		I <sub>c</sub> =0.25mA, I <sub>F</sub> =20mA
		HY860F			0.4		I <sub>c</sub> =0.25mA, I <sub>F</sub> =20mA
		HY860H			0.4		I <sub>c</sub> =0.25mA, I <sub>F</sub> =20mA
		HY860N			0.4		I <sub>c</sub> =0.25mA, I <sub>F</sub> =20mA
		HY870P			0.4		I <sub>c</sub> =0.25mA, I <sub>F</sub> =20mA
		HY870L			0.4		I <sub>c</sub> =0.25mA, I <sub>F</sub> =20mA
		HY805			0.4		I <sub>c</sub> =0.25mA, I <sub>F</sub> =20mA
		On State Collector Current	I <sub>c(ON)</sub>	HY301A	0.5		
HY301-05	0.5						
HY301-07	0.5						
HY301-19	0.5						
HY301-21	0.5						
HY306-01	4.0						
HY306-02	0.5						
HY860C	0.8						
HY860D	0.5						
HY860F	0.5						
HY860H	0.4						
HY860N	0.8						
HY870P	0.8						
HY870L	0.8						
Response Time	Rise Time	t <sub>r</sub>			3	μS	V <sub>CE</sub> =5V, I <sub>c</sub> =2mA R <sub>L</sub> =100Ω
	Fall Time	t <sub>f</sub>			4		

最大 10V

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# HING YIP ELECTRONIC

## Absolute Maximum Rating at Ta=25°C

Parameter	Symbol	Maximum Rating	Unit
Input LED	Continuous Forward Current	60	mA
	Reverse Voltage	5	V
	Peak Forward Current (Pulse Wide=10 S,300pps)	1	A
	Power Dissipation	75	mW
Output Phototransistor	Collector Current	20	mA
	Power Dissipation	100	mW
	Collector-emitter Voltage	30	V
	Emitter-collector Voltage	5	V
Operating Temperature Range	Topr	-25°C to +85 °C	
Storage Temperature Range	Tstg	-40°C to +100°C	
Lead Soldering Temperature [1.6mm(.063 in.)from body]	Ts	260°C for 5 Seconds	