



## JOCHA21BH-W8

Rev.A.1.0

### DESCRIPTION:

The products are 1MBd high-speed opto-couplers. The device is a small-outline coupler suitable for surface-mount assembly. It consists of a high-output-power infrared LED optically coupled to a high-speed photodiode-transistor chip. It is housed in a plastic WSOP8 and guarantees a creepage distance of 5 mm, a clearance of 5 mm and an insulation thickness of 0.4 mm. Therefore, it meets the reinforced insulation class requirements of international safety standards. The products are widely used in programmable controllers, industrial inverters and switching power supplies.

### MAIN FEATURES

High isolation 7500 VRMS

CTI 600

Operating temperature range -40°C to 110°C

REACH & RoHS compliance

	Output Current	$I_o$	8	mA
	Output Power Dissipation	$P_o$	100	mW
Total Power Dissipation		$P_{tot}$	200	mW
Isolation Voltage		$V_{iso}$	7500	Vrms
Operating Temperature		$T_{opr}$	-40~110	
Junction Temperature		$T_j$	125	
Storage Temperature		$T_{stg}$	-55~125	
Soldering Temperature		$T_{sol}$	260	

NOTE1: 100 $\mu$ s pulse, 100Hz frequency

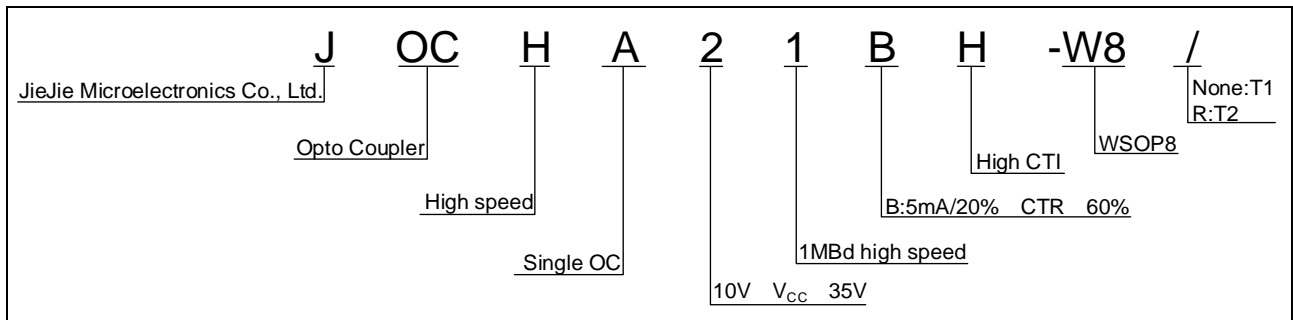
NOTE2: AC for 1minute, R.H.=40~60%

### ELECTRICAL CHARACTERISTICS (Temperature=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Input	Forward Voltage	$V_F$	$I_F=10mA$	-	1.35	1.6	V
	Reverse Current	$I_R$	$V_R=6V$	-	-	1	$\mu A$
	Input Capacitance	$C_{in}$	$V=0, f=1MHz$	-	60	-	pF

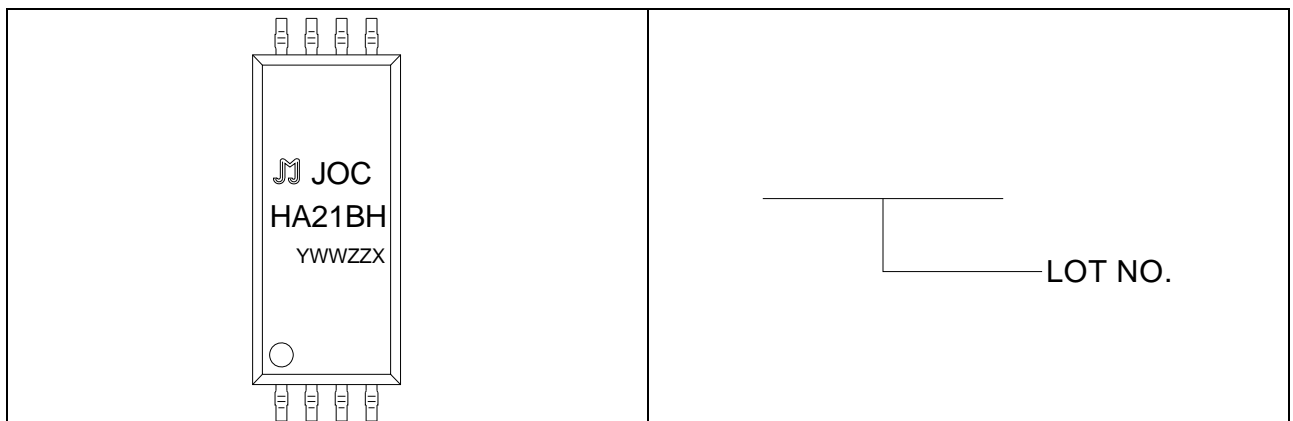
Common Mode Transient Immunity at Logic High	CM <sub>H</sub>	I <sub>F</sub> =0mA, V <sub>CM</sub> =400Vpp, R <sub>L</sub> =4.1k	15	20	-	kV/μs
Common Mode Transient Immunity at Logic Low	CM <sub>L</sub>	I <sub>F</sub> =16mA, V <sub>CM</sub> =400Vpp, R <sub>L</sub> =4.1k	-15	-20	-	kV/μs

ORDERING INFORMATION



Packing Quantity	
Option	Quantity
None/R	1200 Units/Reel

MARKING



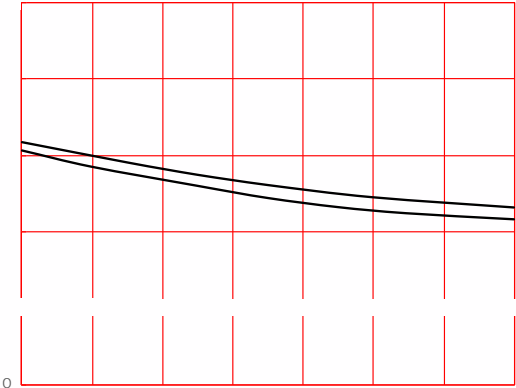
**Characteristics Curves**

**FIG.1:** Forward Current vs. Forward Voltage

M

i

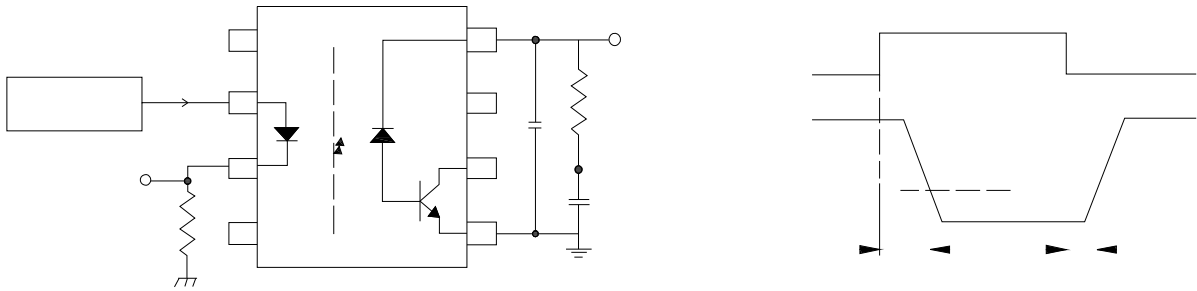
**FIG.7:** Low Level Output Voltage vs. Ambient Temperature



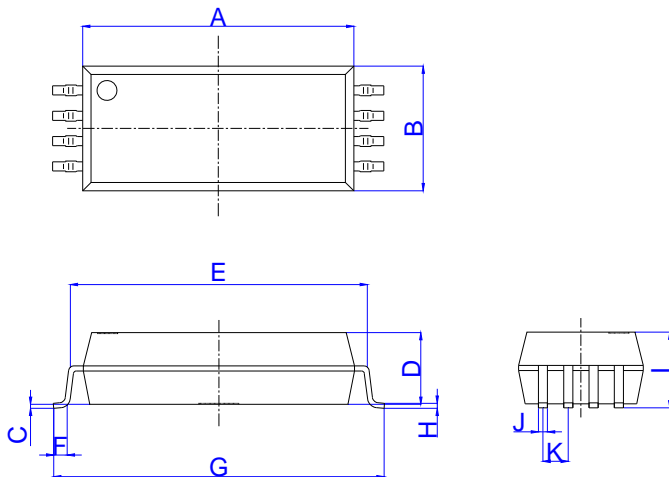
**FIG.8:** Propagation Delay vs. Load Resistance

TEST CIRCUITS

Fig.10: Test Circuit of tPHL, tPLH

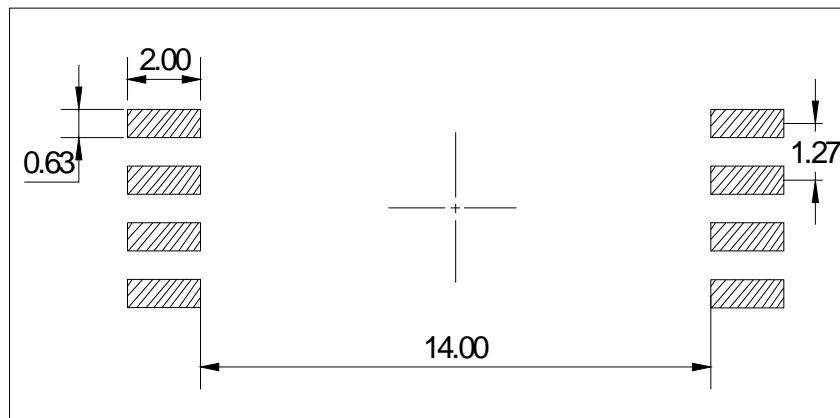


Package Dimension (Unit: mm)

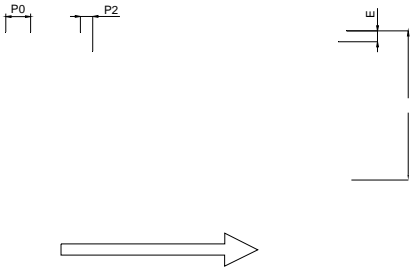


Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	13.50		13.70	0.531		0.539
B	6.15		6.35	0.242		0.250
C	0.10		0.30	0.004		0.012
D	3.50		3.70	0.138		0.146
E	14.71		15.31	0.579		0.603
F	0.52		1.02	0.020		0.040
G	16.36		16.86	0.644		0.664
H	0.10		0.40	0.004		0.016
I	3.65		3.95	0.144		0.156
J	0.307		0.607	0.012		0.024
K	1.02		1.52	0.040		0.060

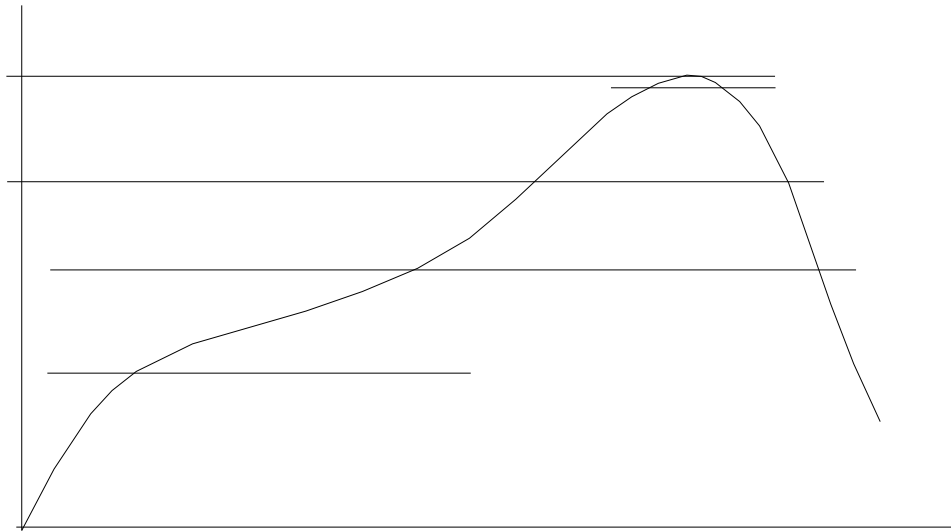
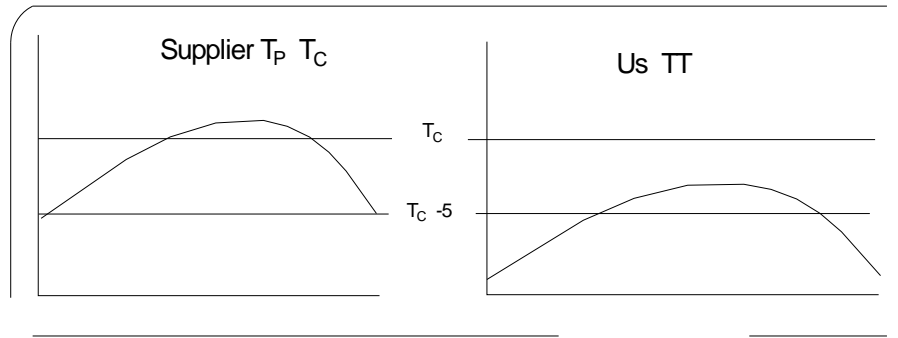
RECOMMENDED SOLDER MASK (Dimensions in mm unless otherwise stated)



CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)



REFLOW INFORMATION



Note:

1. Reflow soldering is recommended at the temperatures and times shown, no more than three times.
2. Avoid direct contact between the epoxy body and any tools or surfaces exceeding its maximum storage temperature.
3. Application of pressure on the epoxy body is prohibited at elevated temperatures. In specific scenarios, any applied force must not exceed 2.5N.
4. Ensure the component has cooled to ambient temperature before proceeding with any subsequent manufacturing steps.
5. The component has a shelf life of one year when stored under standard conditions.
6. Recommend storage Temp.: 0~40°C;  
Recommend storage humidity: <60%;  
MSL level: MSL 1

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