



JOCHA21X-M5 Series

Rev.A.1.0

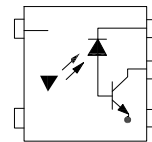
DESCRIPTION:

The products are 1MBd high-speed opto-couplers. T in programmable controllers, industrial inverters and switching power supplies.



MAIN FEATURES

- High isolation 3750 VRMS
- High speed – 1MBd typical
- Operating temperature range -40°C to 110°C
- REACH & RoHS compliance
- HBM: H3A; MM: M4; CDM: C3
- CQC approved
- VDE approved
- UL approved



Truth Table

LED	Output
ON	L
OFF	H

ABSOLUTE MAXIMUM RATINGS (Temperature=25°C)

Parameter		Symbol	Value	Unit
Input	Forward Current	I_F	50	mA
	Peak Forward Current	I_{FP}	1	A
	Reverse Voltage	V_R	6	V
	Input Power Dissipation	P_D	100	mW
Output	Supply Voltage	V_{CC}	35	V
	Output Voltage	V_O	20	V

	Output Current	I_o	8	mA
	Output Power Dissipation	P_o	100	mW
Total Power Dissipation		P_{tot}	200	mW
Isolation Voltage		V_{iso}	3750	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 μ 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	μA
	Input Capacitance	C_{in}					


Common Mode Transient Immunity at Logic High	CM _H	I _F =0mA, V _{CM} =400Vpp, R _L =4.1k	15	20	-	kV/μs
Common Mode Transient Immunity at Logic Low	CM _L	I _F =16mA, V _{CM} =400Vpp, R _L =4.1k	-15	-20	-	kV/μs

ORDERING INFORMATION

J	OC	H	A	2	1	A	-M5	/
JieJie Microelectronics Co., Ltd.	Opto Coupler	High speed	Single OC	10V	V _{CC}	35V	SOP5	None:T1 R:T2
						1MBd high speed	A:10mA/CTR 20% B:5mA/20% CTR 60%	

Packing Quantity	
Option	Quantity
None/R	3000 Units/Reel

MARKING



The marking diagram shows a 5-pin package with the following markings: **JOC**, **HA21X**, and **YWWZZX**. A label **LOT NO.** is shown pointing to the right side of the package.

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

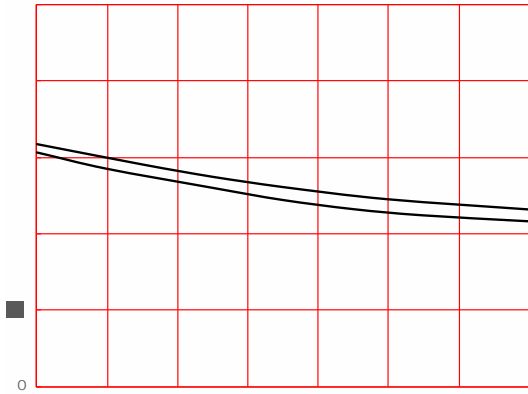
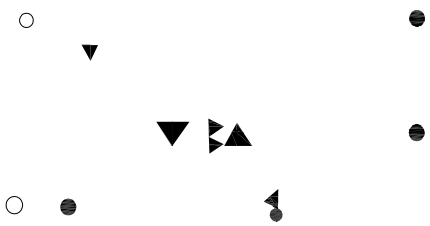


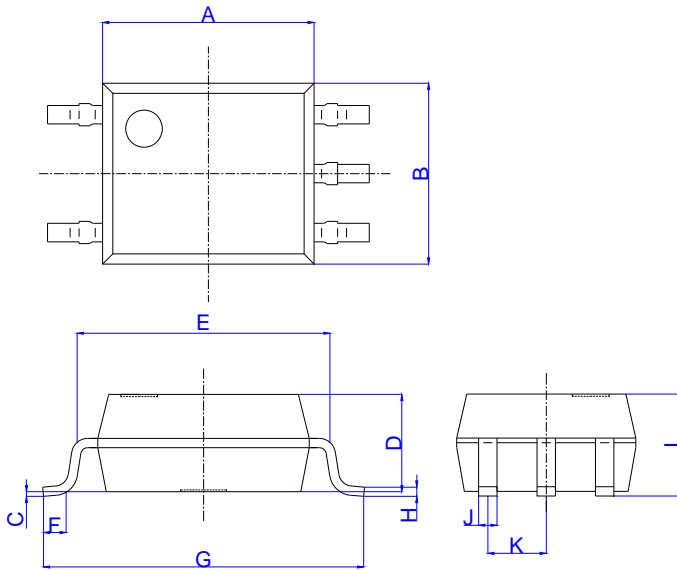
FIG.8: Propagation Delay vs. Load Resistance

TEST CIRCUITS

Fig.10: Switching Time Test Circuit and Waveform

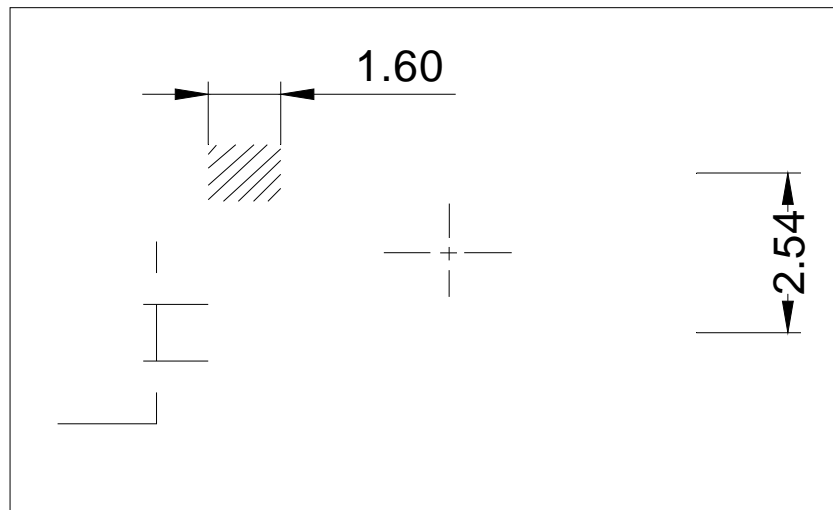


Package Dimension (Unit: mm)



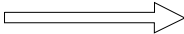
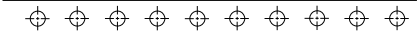
Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.80	0.173		0.189
B	3.60		4.20	0.142		0.165
C	0.00		0.20	0.000		0.008
D	1.90		2.30	0.075		0.091
E	5.00		5.60	0.197		0.220
F	0.34		0.94	0.013		0.037
G	6.70		7.30	0.264		0.287
H	0.10		0.30	0.004		0.012
I	2.00		2.40	0.079		0.094
J	0.25		0.55	0.010		0.022
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)

Option None



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