



DESCRIPTION:

The products are gate driver opto-couplers in the SOP5 package. The device consists of an infrared LED optically coupled to an integrated high-gain, high-speed photodetector IC chip. It provides guaranteed performance and specifications at temperature up to 110 °C. It is physically smaller and compliant with international safety standards for reinforced insulation. It thus provides a smaller footprint solution for applications that require safety standard certification. An internal noise shield provides a guaranteed common-mode transient immunity of $\pm 35 \text{ kV}/\mu\text{s}$. It is ideal for small class IGBT and power MOSFET gate drive. The products are widely used in industrial inverters, IGBT gate drivers, MOSFET gate drivers, induction cooktop and home appliances.

MAIN FEATURES

1A maximum peak output current

High isolation 0 VRMS

Buffer logic type

Operating temperature range -40°C to 110°C

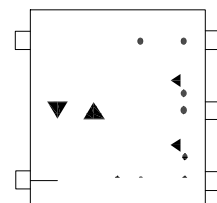
REACH & RoHS compliance

HBM: H3A; MM: M4; CDM: C3

CQC approved

VDE approved

UL approved



Truth Table

LED	V _{CC} -V _{EE} (Positive Going)	V _{CC} -V _{EE} (Negative Going)	Output
OFF	0-30V	0-30V	Low
ON	0-6.9V	0-5.9V	Low
ON	6.9V-8.7V	5.9V-7.5V	TRANSITION
ON	8.7V-30V	7.5V-30V	HIGH

LED	Forward Current	I_F	50	mA
	Peak Forward Current	I_{FP}	1	A
	Reverse Voltage	V_R	6	V



	Low Level Output Voltage	V_{OL}	$I_o=100mA$	-	0.075	0.2	V
	Threshold Input Current	I_{FLH}	$V_o \leq 5V$	-	2.5	5	mA
	Threshold Input Voltage	V_{FHL}	$V_o \leq 5V$	0.8	-	-	V
	Supply Voltage	V_{CC}	-	10	-	30	V
		V_{UVLO+}	$V_o \leq 2.5V,$	7.5	8.7	9.5	V



Recommended Operating Conditions

Input On-state Current	$I_{F(ON)}$	7	-	10	mA
Input Off-state Voltage	$V_{F(OFF)}$	0	-	0.8	V
Supply Voltage	V_{CC}	10	-	30	V

Operating Frequency f 5

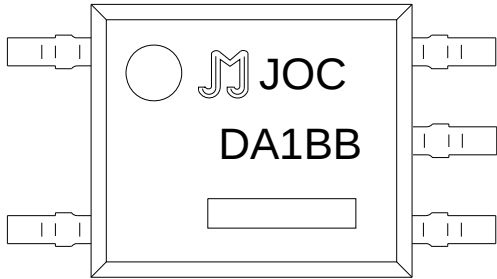
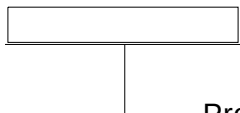


ORDERING INFORMATION

J	OC	D	A	1	B	B	-M5	/
JieJie Microelectronics Co., Ltd.	Opto Coupler	Driver	High-side PMOS	1: I _{T(RMS)} : 1A	UVLO: 7-9V	B: I _{FT} ≤ 5mA	SOP5	None: T1 R: T2

Packing Quantity			
Option	Quantity	Quantity – Inner box	Quantity –Outer box

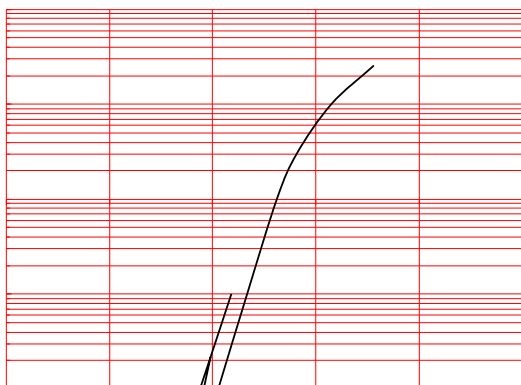
MARKING

	 Production Information Code
---	---



Characteristics Curves

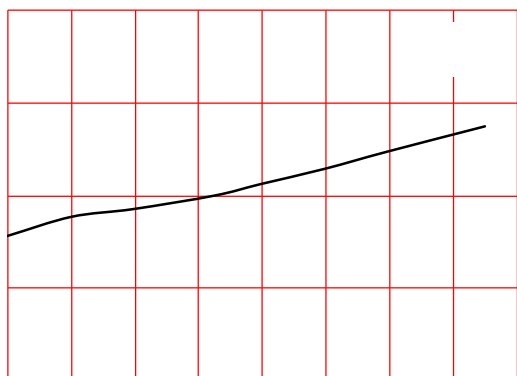
Forward Current vs. Forward Voltage



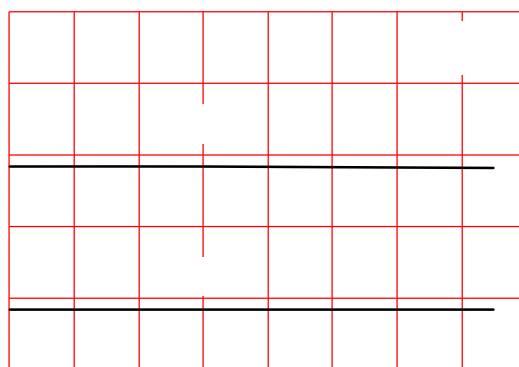
Max. Allowable LED Forward Current
vs. Ambient Temperature



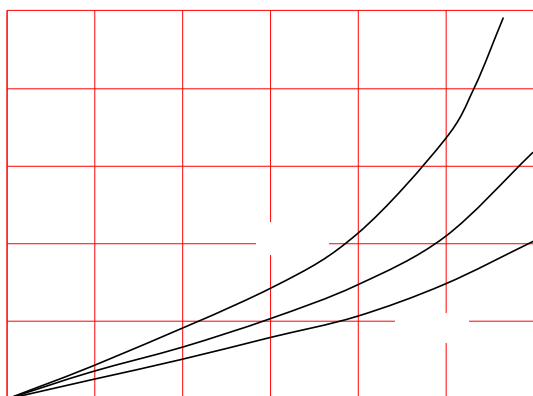
Low-level Output Voltage vs. Ambient Temperature



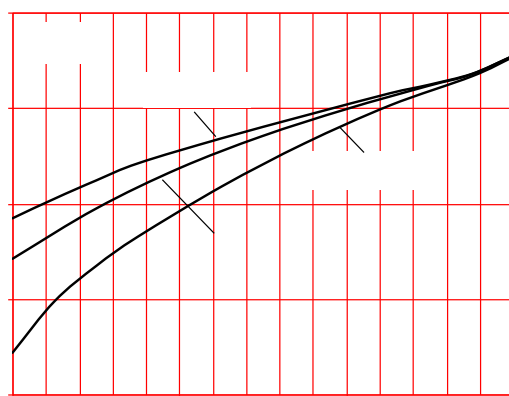
High-level Output Voltage vs. Ambient Temperature



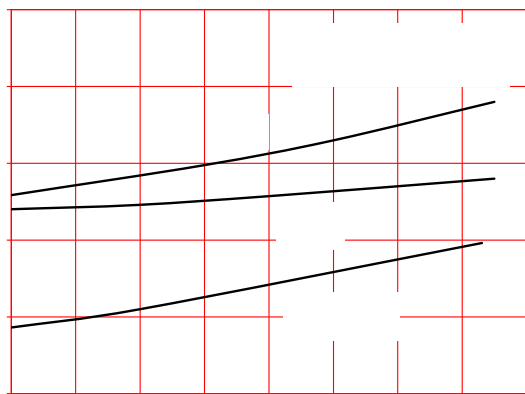
Low-level Output Voltage vs. Peak Low-level Output Current



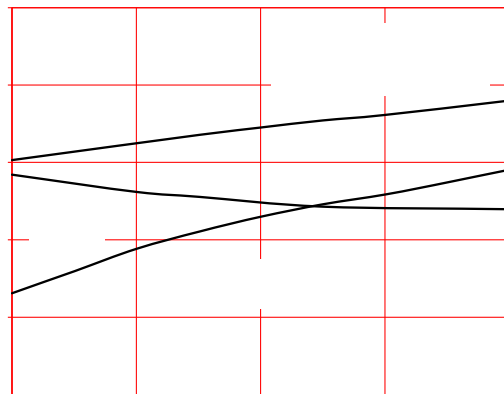
High-level Output Voltage Drop vs. Peak High-level Output Current



Propagation Delay Time, Pulse Width Distortion vs. Ambient Temperature

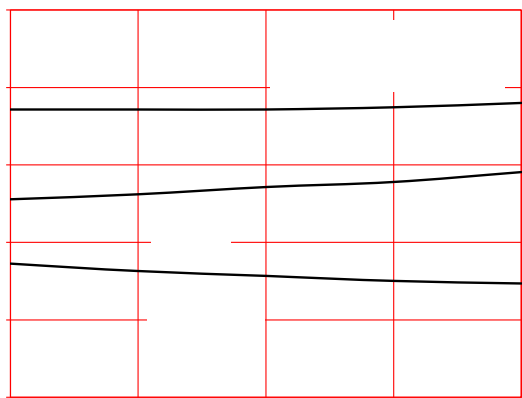


Propagation Delay Time, Pulse Width Distortion vs. Forward Current



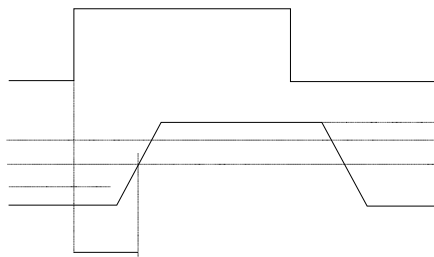
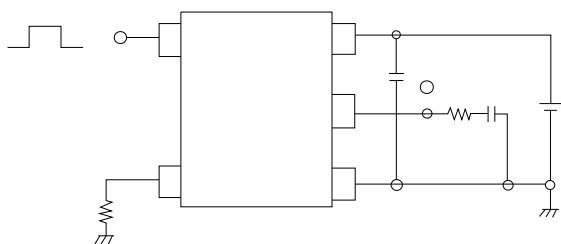


Propagation Delay Time, Pulse Width Distortion vs. Supply Voltage



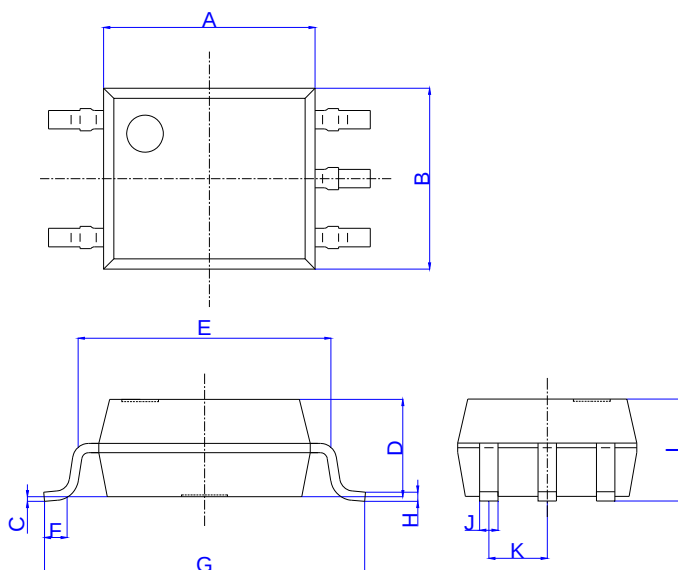
Test Circuits

Switching Time Test Circuit and Waveform



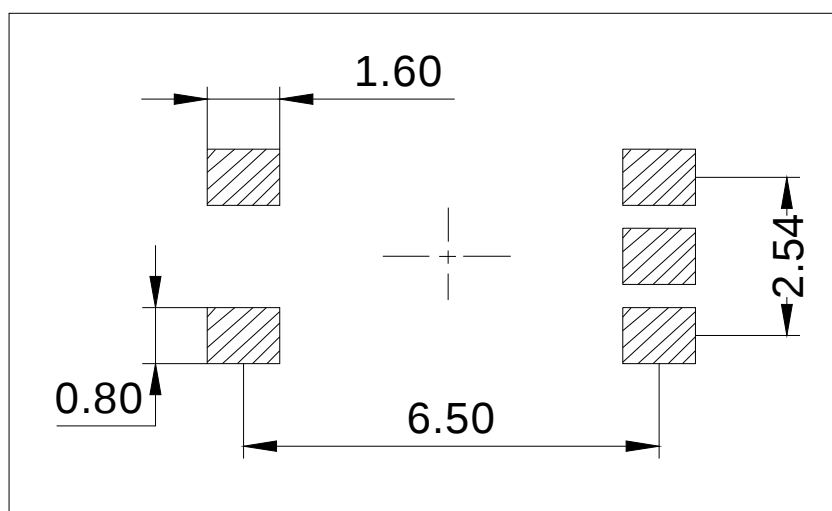


Package Dimension (Unit: mm)



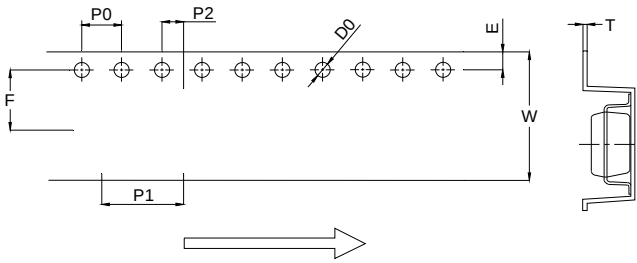
Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.80	0.173		0.189
B	3.60		4.20	0.142		0.165
C	0.00		0.20	0.000		0.008
D	1.90		2.30	0.075		0.091
E	5.00		5.60	0.197		0.220
F	0.34		0.94	0.013		0.037
G	6.70		7.30	0.264		0.287
H	0.10		0.30	0.004		0.012
I	2.00		2.40	0.079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





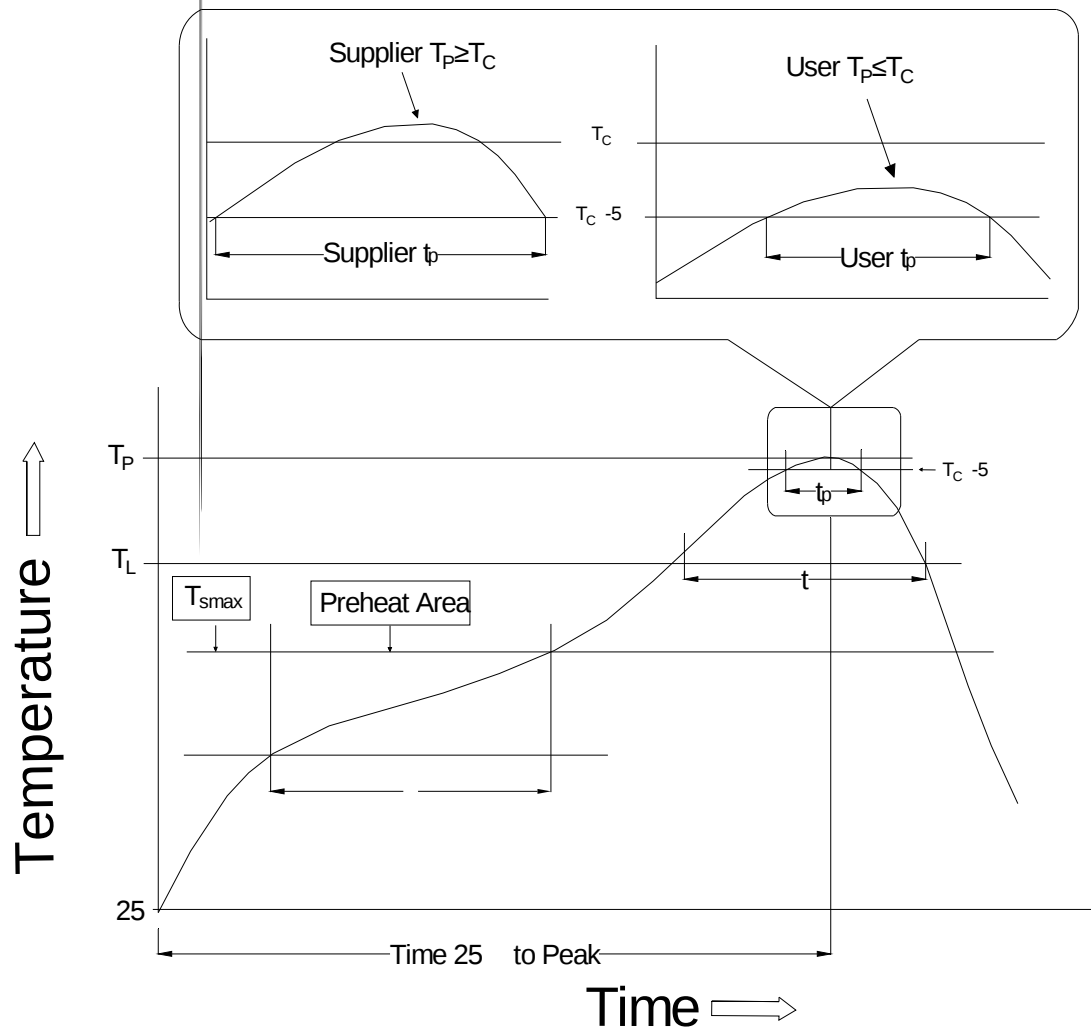
CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
D0						
P0						
P1						
P2						
E						
F						
T						
W						



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

Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co., Ltd. assumes no responsibility for the consequences of use without consideration for such information nor use beyond it. Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement.

Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of third parties which may result from the use of such products and information. This document supersedes and replaces all information previously supplied.



is a registered trademark of Jiangsu JieJie Microelectronics Co., Ltd.

Copyright © 2026 Jiangsu JieJie Microelectronics Co., Ltd. All rights reserved.