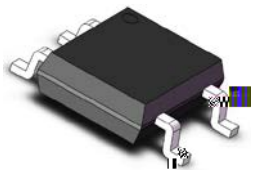
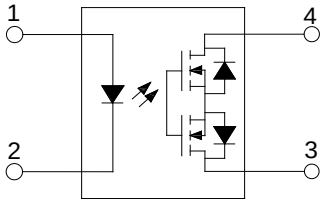
JOR21X Series

Rev.A.1.0

DESCRIPTION:

The products are 4-pin optical relays. The device consists of an AlGaAs infrared emitting diode input stage optically coupled to a high-voltage output detector circuit in a plastic SOP4 package. The detector consists of a high-speed photovoltaic diode array and driver circuitry. The products are widely used in measuring and testing equipment, security and disaster prevention market, industrial machinery and equipment.





MAIN FEATURES

High isolation 3750 Vrms
Wide variation of load voltage 60V to 600V
Operating temperature range -40℃ to 110℃
REACH & RoHS compliance
HBM: H3A; MM: M4; CDM: C3
CQC approved
VDE approved
UL approved

ABSOLUTE MAXIMUM RATINGS (Temperature=25℃)

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	75	mW
Output	Load Voltage	JOR212	V_O	60	V
		JOR213		100	
		JOR217		200	
		JOR214		400	
		JOR216		600	
	Continuous load current	JOR212	I_O	1.25	A
		JOR213		1.25	
		JOR217		0.3	
		JOR214		0.1	
		JOR216		0.05	
	Output Power Dissipation		P_O	300	mW

JOR21X

FIG.7: Turn On Time vs. Ambient Temperature

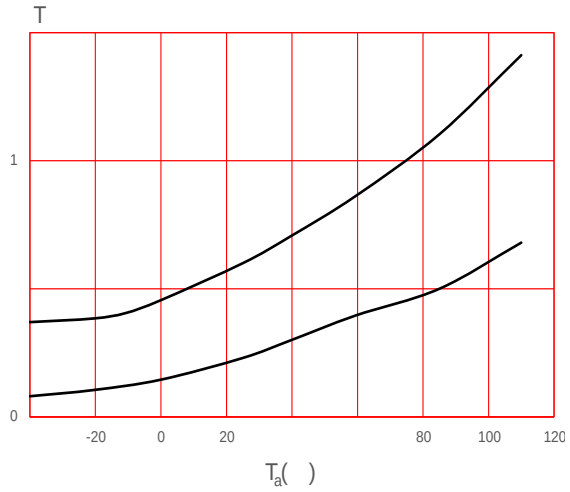
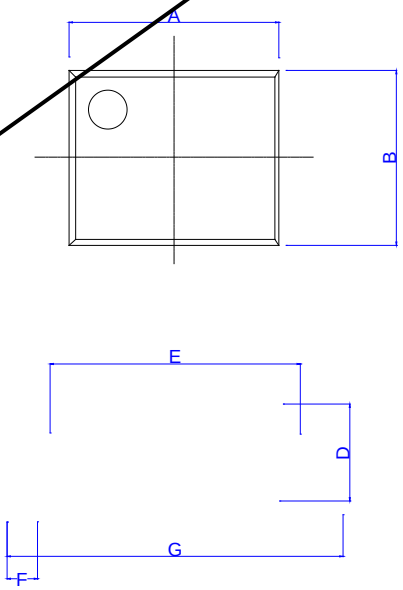


FIG.8: Turn Off Time vs. Ambient Temperature

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						
D	1.90		2.30	0.075		0.091
E	5.00		5.60	0.197		0.220
F						
G	6.70			0.264		
H						
I						
J						

CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

Option T1



JOR21X

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℃;