

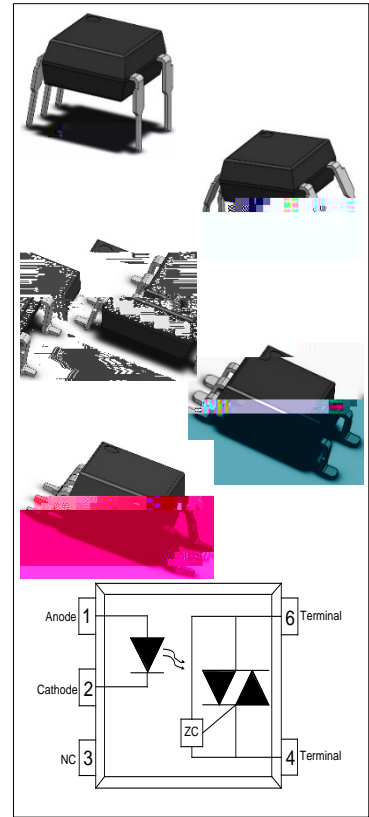


## JOC304XD5 Series

Rev.A.1.1

### DESCRIPTION:

The JOC304XD5 series combine an AlGaAs infrared emitting diode as the emitter which is optically coupled to a monolithic silicon zero-cross photo triac in a plastic DIP5 package with different lead forming options. The products are widely used in solenoid/valve controls, lighting controls, motor controls, temperature controls, static AC power switches, solid state relays, interfacing microprocessors up to 120 V<sub>AC</sub> peripherals.



### MAIN FEATURES

High isolation 5000 VRMS

DC input with zero-cross photo triac output

Operating temperature range -55 °C ~ 125 °C

Isolation Voltage: 5000 VRMS

HBM: 1000V

CQC approved

VDE approved

UL approved

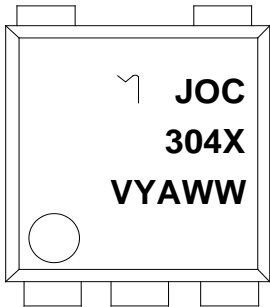
### ABSOLUTE MAXIMUM RATINGS (Case temperature=25°C)

Parameter		Symbol	Value	Unit
Input	Forward Current	I <sub>F</sub>	60	mA
	Reverse Voltage	V <sub>R</sub>	6	V
	Junction Temperature	T <sub>j</sub>	125	
	Input Power Dissipation	P <sub>I</sub>	100	mW
	Power Dissipation Derating (T <sub>a</sub> 25 °C)	P <sub>D</sub> /	-1.33	mW/
Output	Off-state Output Terminal Voltage	V <sub>OFF</sub>	400	V
	Peak On-state Current (100µs pulse, 120 pps)	I <sub>TP</sub>	2	A
	On-state RMS Current	I <sub>T(RMS)</sub>	100	mA
	Peak Repetitive Surge Current (P <sub>W</sub> =10 ms)	I <sub>TSM</sub>	1	A
	Junction Temperature	T <sub>j</sub>	125	
	Output Power Dissipation	P <sub>O</sub>	250	mW



ORDERING AND MARKING INFORMATION

MARKING INFORMATION



Characteristics Curves

**FIG.1:** Forward Current vs. Ambient Temperature



**FIG.2:** On-state Terminal Current vs. Ambient Temperature

**JOC304XD5**

**TEST CIRCUITS**

**FIG.12:** Test Circuits of Turn On Time

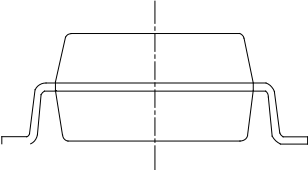
**FIG.13:** Waveforms of Turn On Time

Package Dimension (Unit:mm)

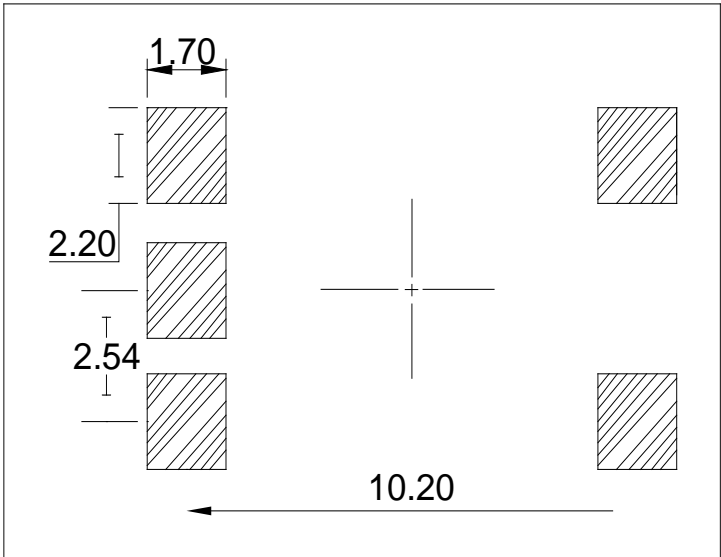
Option S Type:



Option SLM Type:



Option SL

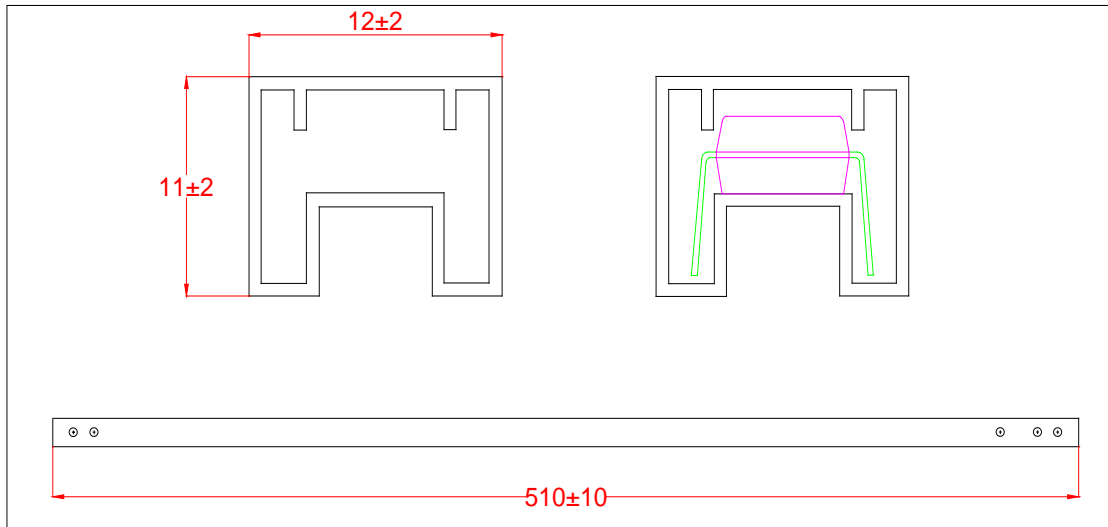


Option SLM

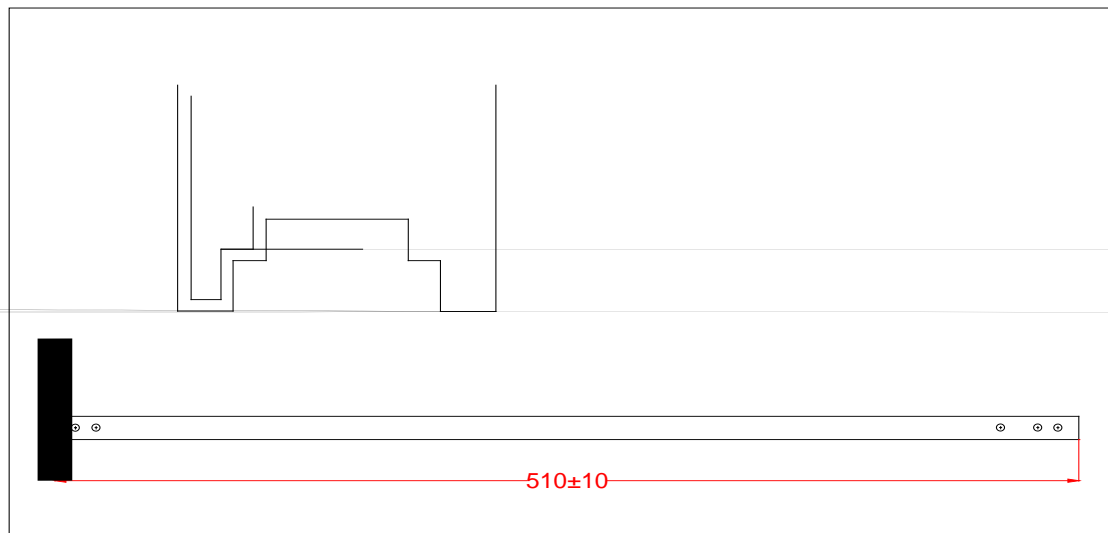


TUBE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

Standard DIP



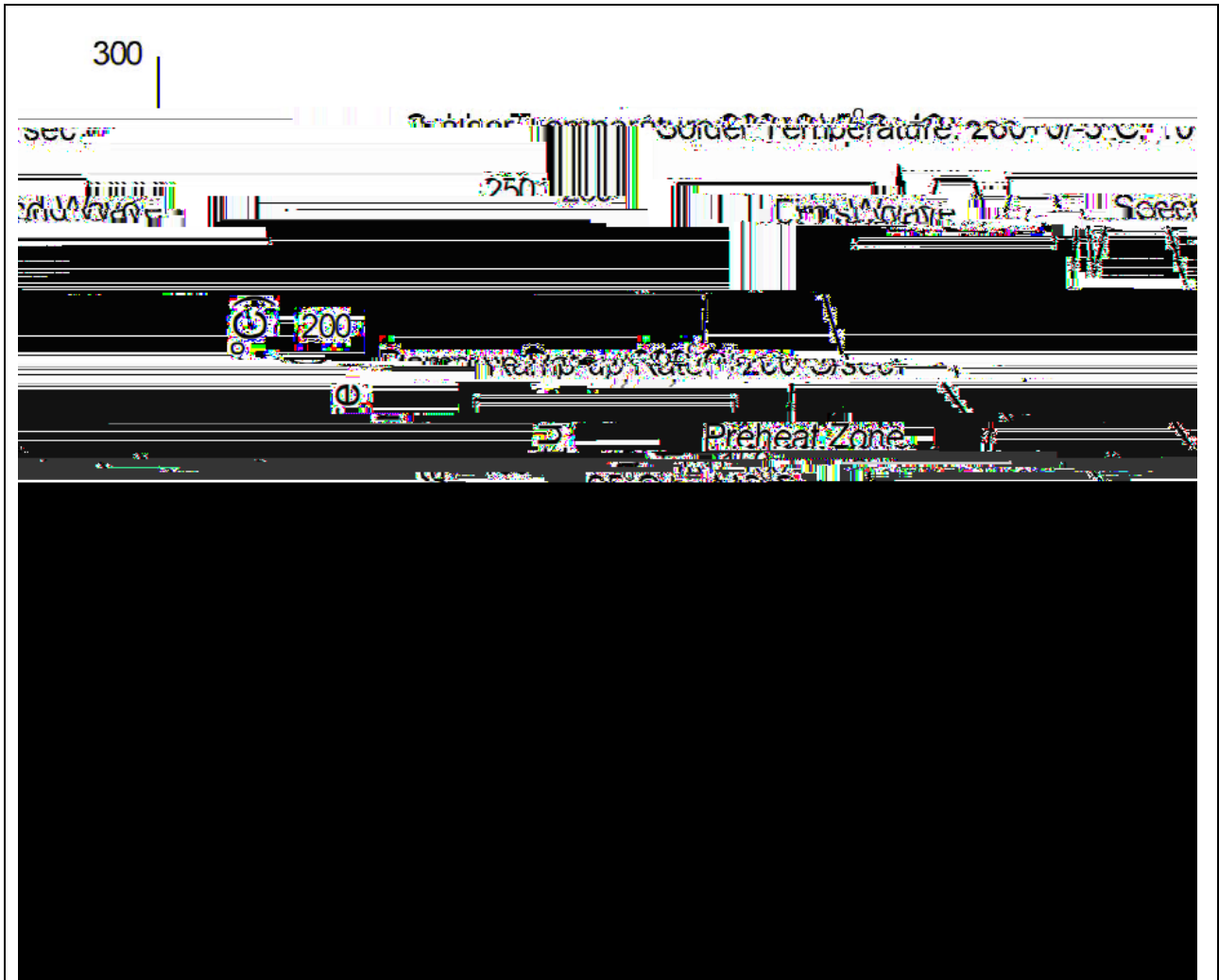
Option M



CARRIER TAPE SPECIFICATIONS (



WAVE SOLDERING



HAND SOLDERING BY SOLDERING IRON

Soldering Temperature	360 5
Soldering Time	3s max.

## Document Revision History

Date	Revision	Changes
Apr.2, 2025	A.1.0	Last update
Nov.6, 2025	A.1.1	Add S&SLM package

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