JOC308XD5 Series

Rev.A.1.0

DESCRIPTION:

The products are 5-pin thyristor opto-couplers. The device combines an AIGaAs infrared emitting diode as the emitter which is optically coupled to a monolithic silicon zero-crossing 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 265 V_{AC} peripherals.

MAIN FEATURES

High isolation 5000 VRMS

DC input with zero-crossing photo triac output

Operating temperature range -55 - Z U -

8 + ') . 8 U . 9 I U S V R O G T I K

HBM: H3A; 3 3 M4; CDM: C3

CQC approved

VDE approved

UL approved

ABSOLUTE MAXIMUM RATINGS (Temperature=25°C)

Parameter		Symbol	Value	Unit
Input	Forward Current	I_F	50	mA
	Peak Forward Current	I_{FP}	1 [7]	A
	Reverse Voltage	V_R	6	V
	Power Dissipation	P_D	75	mW

Operating Temperature	T_{opr}	-55~110	
Junction Temperature	T_j	125	
Storage Temperature	T_{stg}	-55~125	
Soldering Temperature	T_{sol}	260	

Peak pulse voltage

(T_j=25 ; non- repetitive,off-state)

Characteristics Curves

FIG.1: Max. Allowable LED Forward Current vs. Ambient Temperature

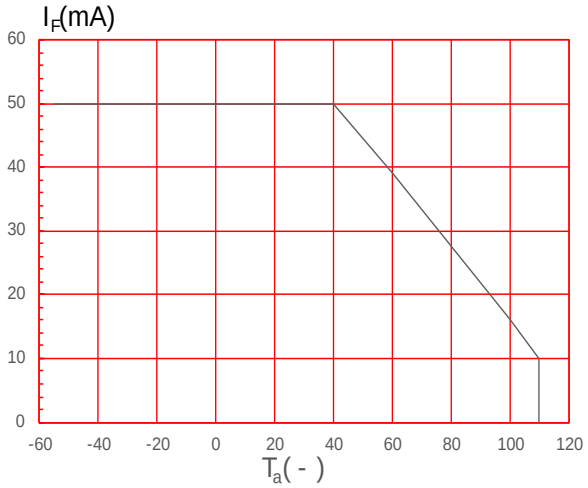


FIG.2: On-state Terminal Current vs. Ambient Temperature

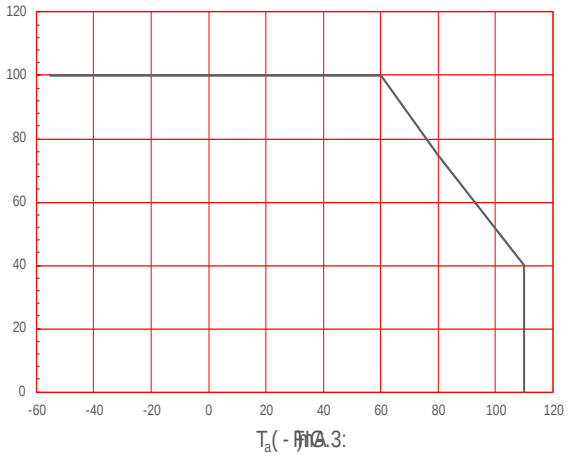
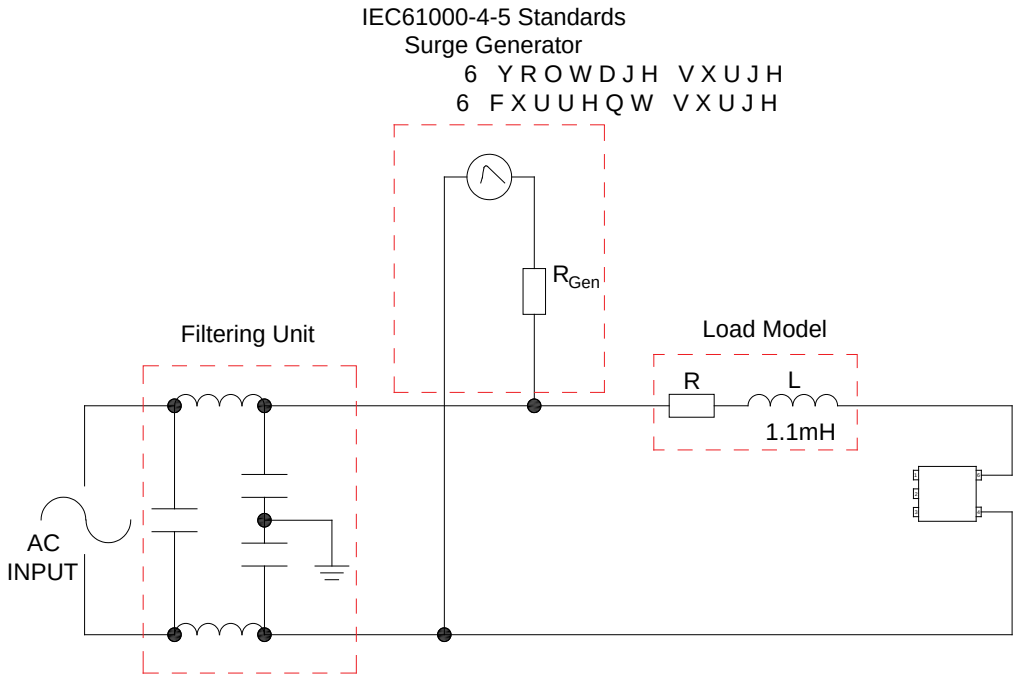


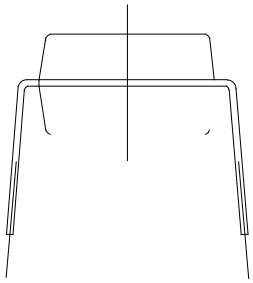
FIG.7: Normalized On-

FIG.16: Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



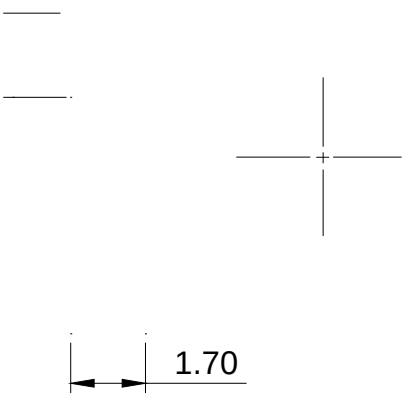
Package Dimension (Unit: mm)

Standard DIP Type:



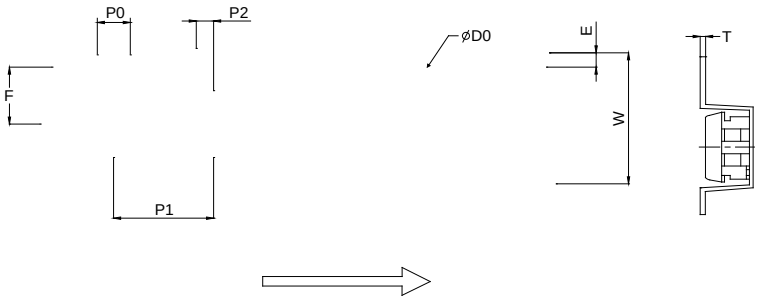
RECOMMENDED SOLDER MASK (Dimensions in mm unless otherwise stated)

Option SMD



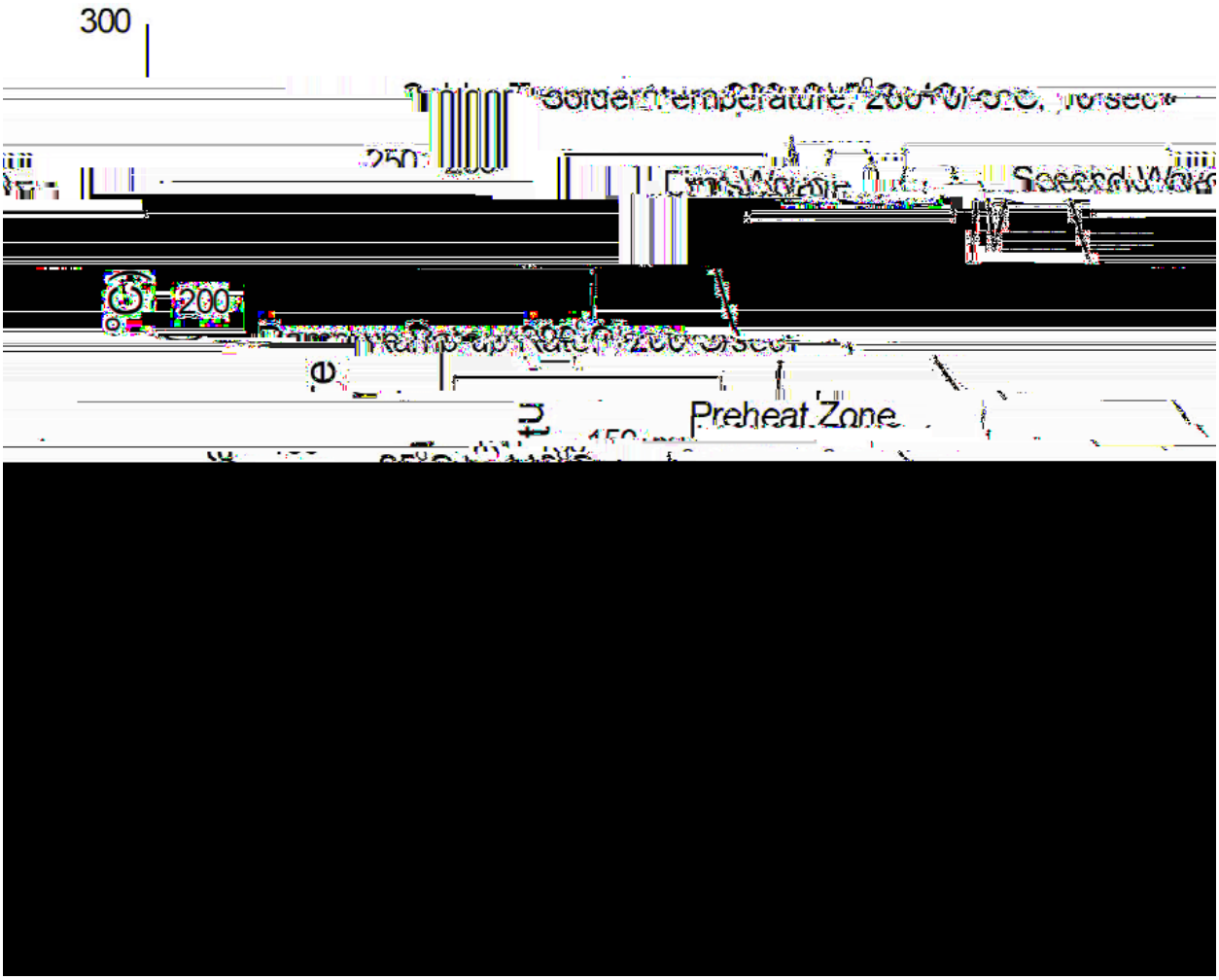
CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

Option T 1



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
D0		1.50	1.60		0.059	0.063
P0	3.90	4.00	4.10	0.154	0.157	0.161
P1	11.90	12.00	12.10	0.469	0.472	0.476
P2	1.90	2.00	2.10	0.075	0.079	0.083
E	1.65	1.75	1.85	0.065	0.069	0.073
F	7.40	7.50	7.60	0.291	0.295	0.299
T	0.35	0.40	0.45	0.014	0.016	0.018
W	15.70	16.00	16.30	0.618	0.630	0.642

WAVE SOLDERING



HAND SOLDERING BY SOLDERING IRON	
Soldering Temperature	360 ± 5
Soldering Time	3s max.