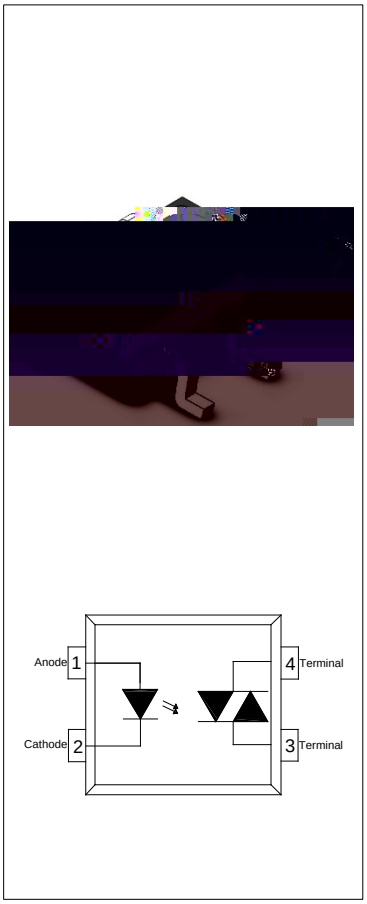
JOC305XM4 Series Rev.A.1.0

DESCRIPTION:

The products are 4-pin thyristor opto-couplers. The device combines an AIGaAs infrared emitting diode as the emitter which is optically coupled to a monolithic silicon random-phase photo triac in a plastic SOP4 package. With the robust coplanar double mold structure, the device provides the most stable isolation feature. 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 3750 VRMS
DC input with random-phase photo triac output
Operating temperature range -55 - Z U -
REACH & RoHS compliance
HBM: H3A; MM: M4; CDM: C3
CQC approved
VDE approved
UL approved

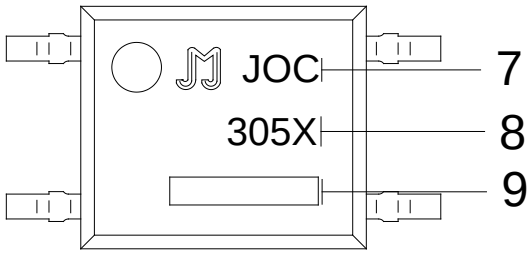
ABSOLUTE MAXIMUM RATINGS (Temperature=25°C)

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
Output	Off-state Output Terminal Voltage	V_{OFF}	600	V
	Peak O Q í V W CurrentH V S X O V H S S V	I_{TP}	2	A
	On-state RMS Current	$I_{T(RMS)}$	100	mA
	Peak Repetitive Surge Current (P_W=10 ms)	I_{TSM}	1.2	A
	Output Power Dissipation	P_O	250	mW

Total Power Dissipation	P_{tot}	325	mW
Isolation Voltage	V		

ORDERING AND MARKING INFORMATION

MARKING INFORMATION



7 : Company Abbr.
8 : Part Number & Rank
9 : Production Information Code

Packing Quantity

Option	Quantity	Quantity – Inner box	Quantity –Outer box
SOP4	3000 Units/Reel	2 Reels/Inner box	5 Inner box/Outer box =30k Units

Characteristics Curves

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

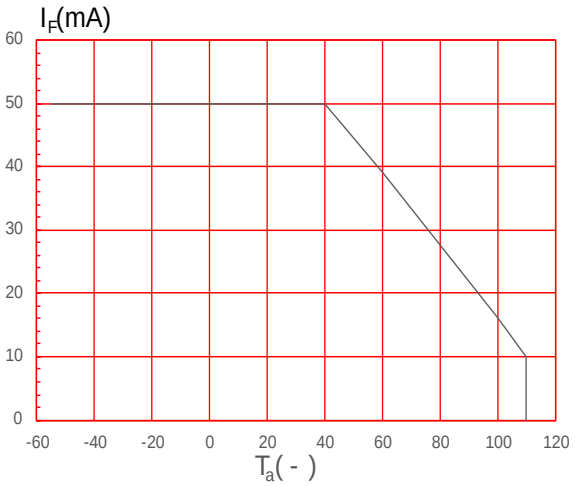
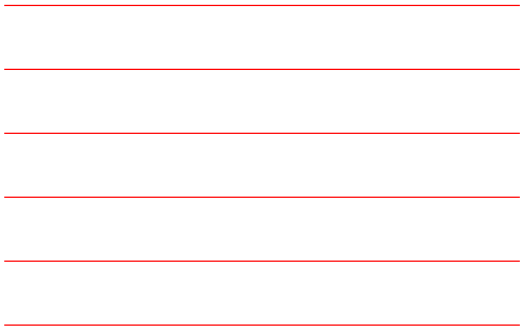


FIG.2: On-state Terminal Current vs. Ambient Temperature



JOC305XM4

TEST CIRCUITS

FIG.12: Test Circuits of Turn On Time

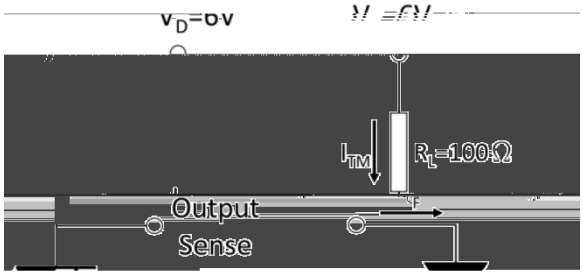


FIG.13: Waveforms of Turn On Time

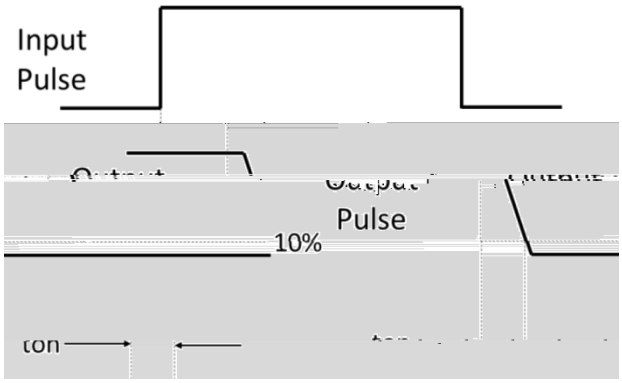


Fig.14: Test Circuits of dV/dt

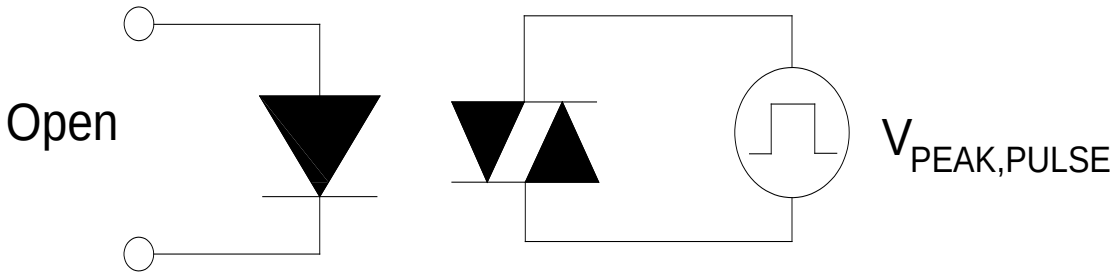
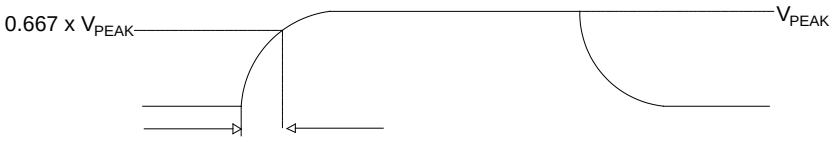
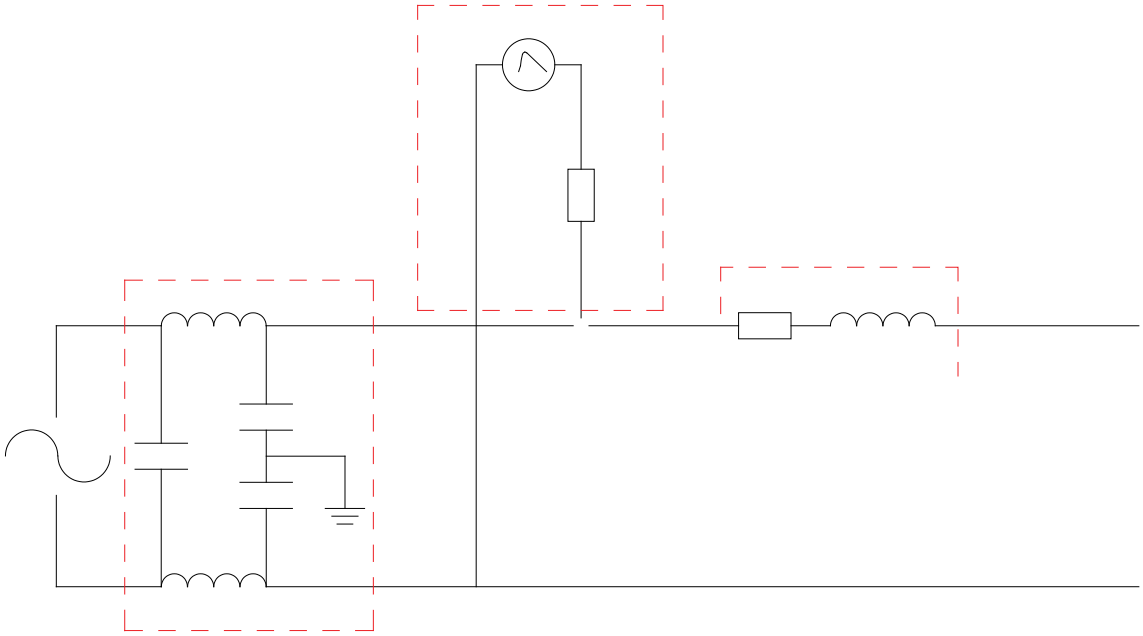


Fig.15: Waveforms of dV/dt

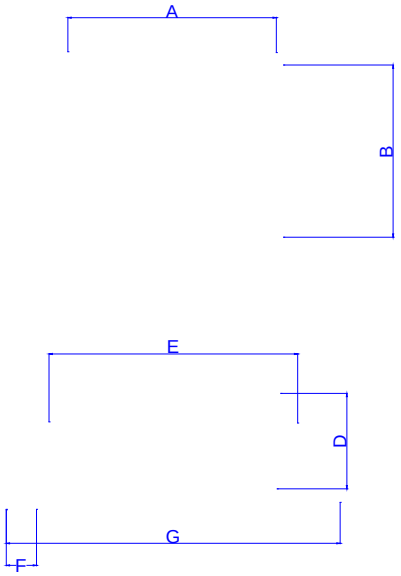


$$dV/dt=\frac{0.667 \times V_{PEAK}}{}$$

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



Package Dimension (Unit: mm)





Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.80	0.173I68Tj -0F40		
B	3.60		4.20			
C						
E						
G						
I						

CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

Option T1

