

JOC301XM4 Series

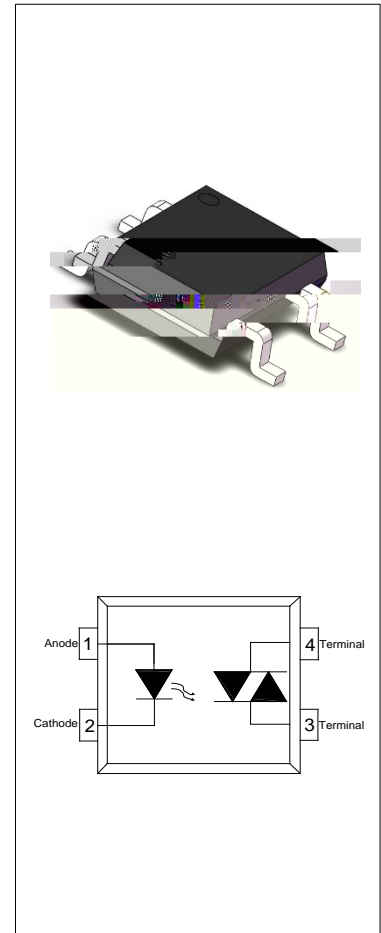
Rev.A.1.0

DESCRIPTION:

The JOC301XM4 series combine an AlGaAs 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, JOC301XM4 series provide the most stable isolation feature. The products are widely used in solenoid/value controls, lighting controls, motor controls, temperature controls, static AC power switches, solid state relays, interfacing microprocessors up to 120 V_{AC} peripherals.

MAIN FEATURES

- High isolation 3750 VRMS
- DC input with random-phase photo triac output
- Operating temperature range -55 to 100
- REACH & RoHS compliance
- Halogen free
- MSL class 1
- HBM: H3A ; MM: M4
- CQC approved
- VDE approved
- UL approved

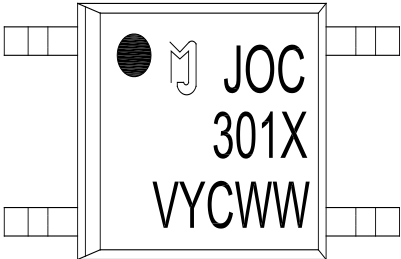


ABSOLUTE MAXIMUM RATINGS (Temperature=25°C)

Parameter		Symbol	Value	Unit
Input	Forward Current	I _F	60	mA
	Reverse Voltage	V _R	6	V
	Junction Temperature	T _j	125	
	Input Power Dissipation	P _I	100	mW
	Power Dissipation Derating (T _a 25)	P _D /	-1.33	mW/
Output	Off-state Output Terminal Voltage	V _{OFF}	250	V
	Peak On-state Current (100μs pulse, 120 pps)	I _{TP}	2	A
	On-state RMS Current	I _{T(RMS)}	100	mA
	Peak Repetitive Surge Current (P _W =10 ms)	I _{TSM}	1	A

ORDERING AND MARKING INFORMATION

MARKING INFORMATION



Characteristics Curves

FIG.1: Forward Current vs. Ambient Temperature

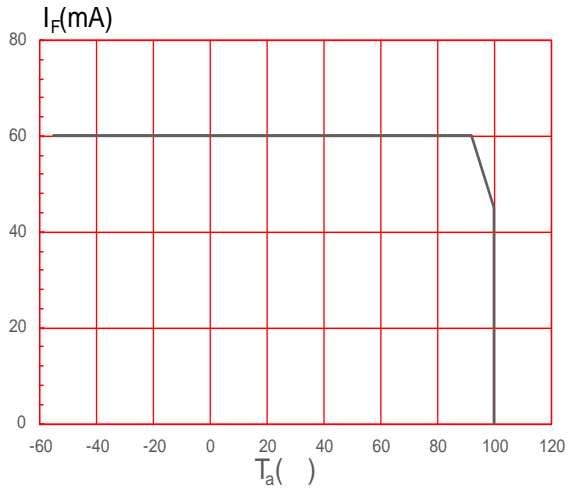


FIG.2: On-state Terminal Current vs. Ambient Temperature

JOC301XM4

FIG.7: Normalized On-state Terminal Voltage vs. Ambient Temperature

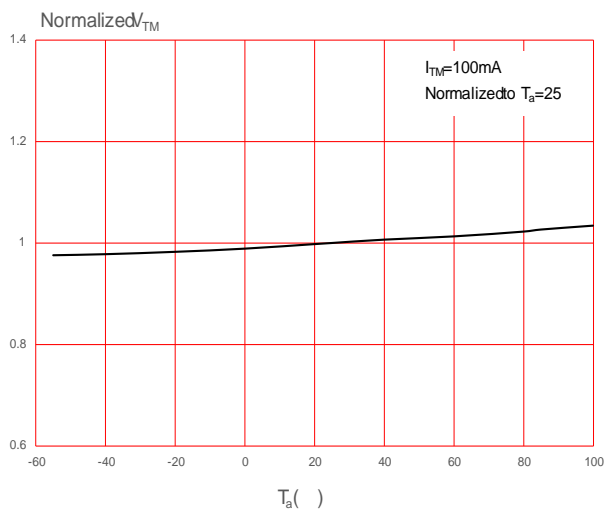


FIG.8: On-state Terminal Voltage vs. On-state Terminal Current

TEST CIRCUITS

FIG.12: Test Circuits of Turn On Time

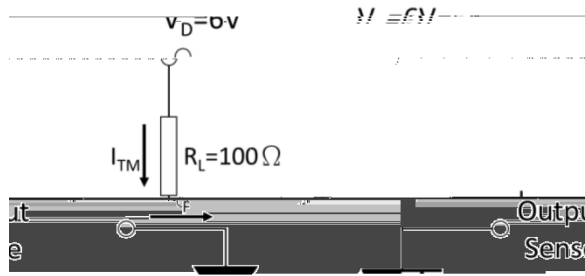


FIG.13: Waveforms of Turn On Time

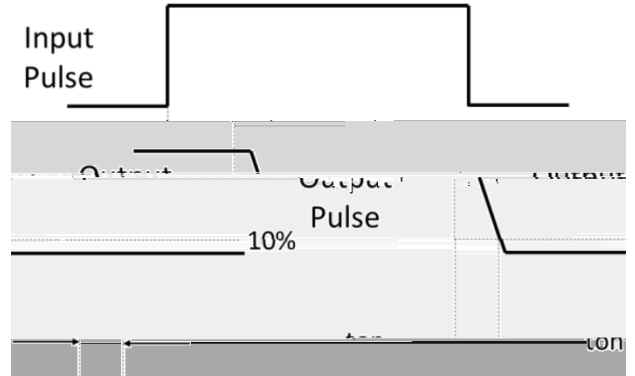


Fig.14: Test Circuits of dV/dt

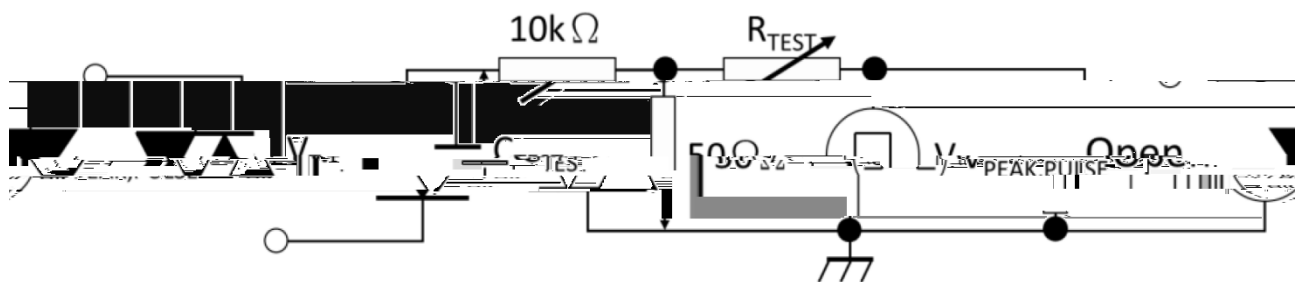
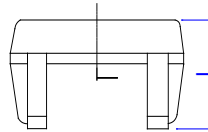
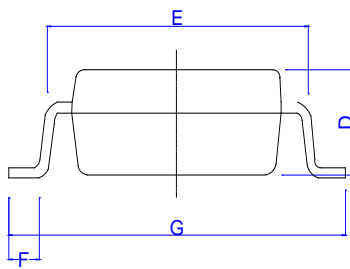
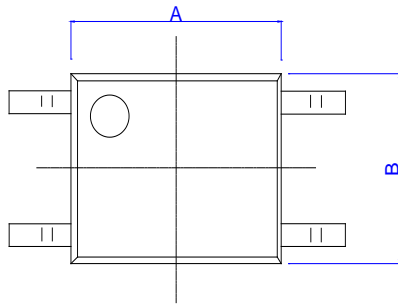


Fig.15: Waveforms of dV/dt



Package Dimension (Unit: mm)



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.20		4.85	0.165		0.191
B	3.30		4.40	0.130		0.173
C						
D	1.75		2.80	0.069		0.110
E	4.90		5.80	0.193		0.228
F						
G	6.30			0.248		
H						
I						
J						

CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

Option T1



REFLOW INFORMATION

