JOC307XD4 Series

Rev.A.1.1

DESCRIPTION:

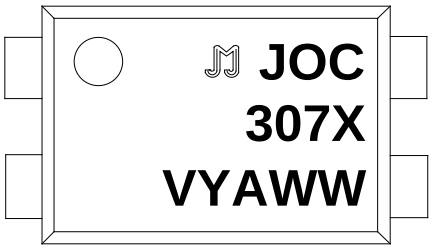
The JOC307XD4 series combine an AIGaAs infrared emitting diode as the emitter which is optically coupled to a monolithic silicon random-phase photo triac in a plastic DIP4 package with different lead forming options. With the robust coplanar double mold structure, JOC307XD4 series provide the most stable isolation feature. The products are widely used in solenoid/valve controls, lighting controls, motor controls, temperature controls,

	Junction Temperature	T_j	125	
	Output Power Dissipation	P_O	250	mW
	Power Dissipation Derating ($T_a \geq 25$)	ΔP_D/	-3.33	mW/
Total Power Dissipation		P_{tot}	350	mW
Isolation Voltage		V_{iso}	5000	Vrms

Operating Temperature

ORDERING AND MARKING INFORMATION

MARKING INFORMATION



JOC : Company Abbr.
307X : Part Number & Rank
V :

ORDERING INFORMATION

JOC307XD4(Y)(Z)-GV

JOC – Company Abbr.
307X – Part Number (1/2/3)
D4 – DIP4 Package
Y – Lead Form Option (M/S/SL/SLM/None)
Z – Tape and Reel Option (T1/T3)
G – Green
V – VDE Option (V or None)

Packing Quantity

Option	Quantity	Quantity – Inner box	Quantity –Outer box
None	100 Units/Tube	32 Tubes/Inner box	10 Inner box/Outer box =32k Units
M	100 Units/Tube	32 Tubes/Inner box	10 Inner box/Outer box =32k Units
S(T1)	1500 Units/Reel	3 Reels/Inner box	

Characteristics Curves

FIG.1: Forward Current vs. Ambient Temperature

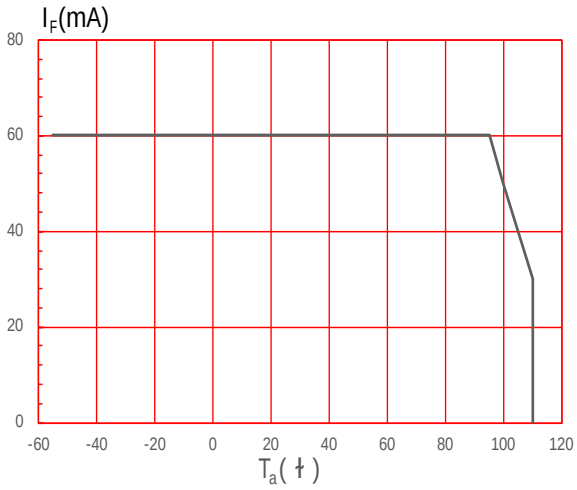
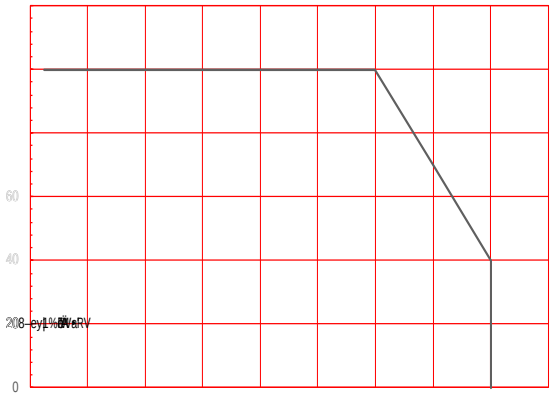


FIG.2: On-state Terminal Current vs. Ambient Temperature



TEST CIRCUITS

FIG.12: Test Circuits of Turn On Time

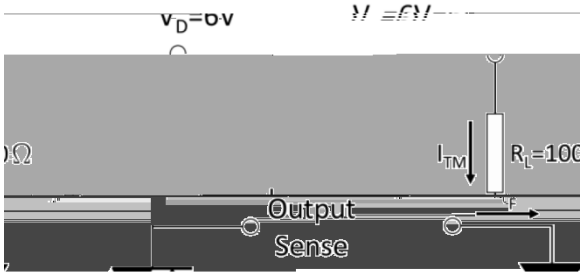


FIG.13: Waveforms of Turn On Time

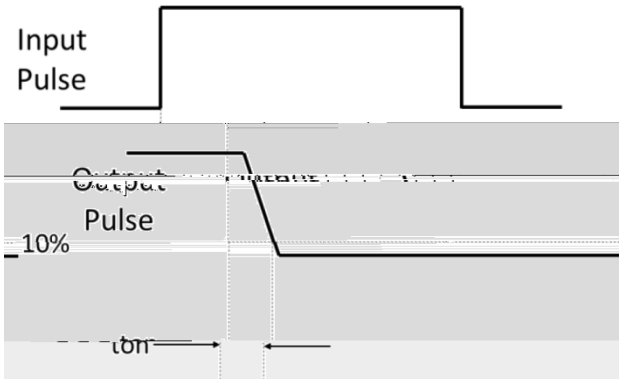


Fig.14: Test Circuits of dV/dt

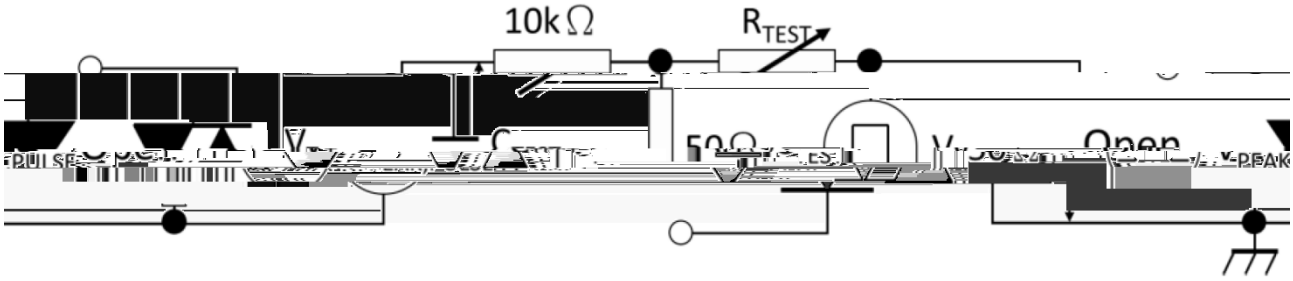
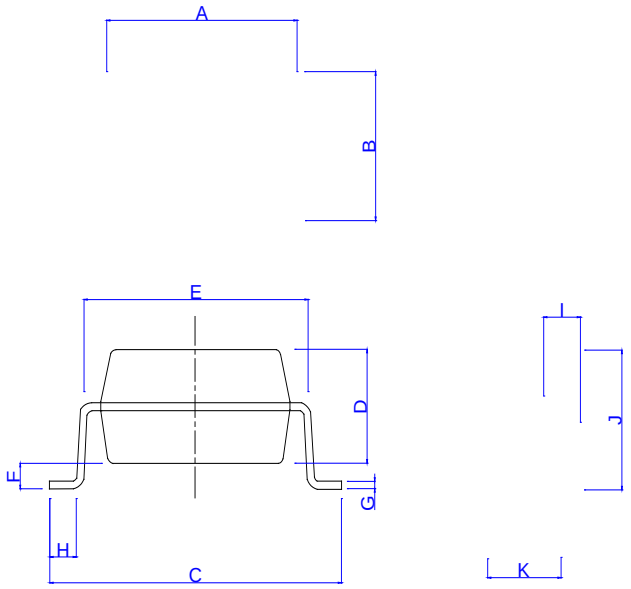


Fig.15: Waveforms of dV/dt

Option S Type:

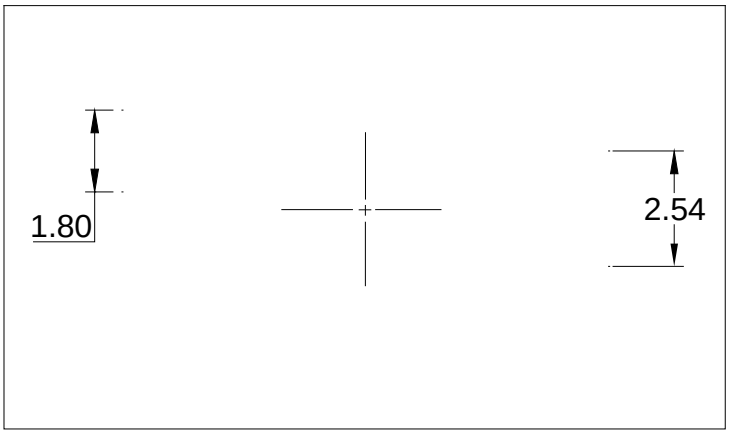


Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	6.30		6.70	0.249		0.265
B	4.38		4.78	0.173		0.189
C	9.85		10.45	0.389		0.413
E	7.32		7.92	0.289		0.313
G						
I						
K						

Option SLM Type:

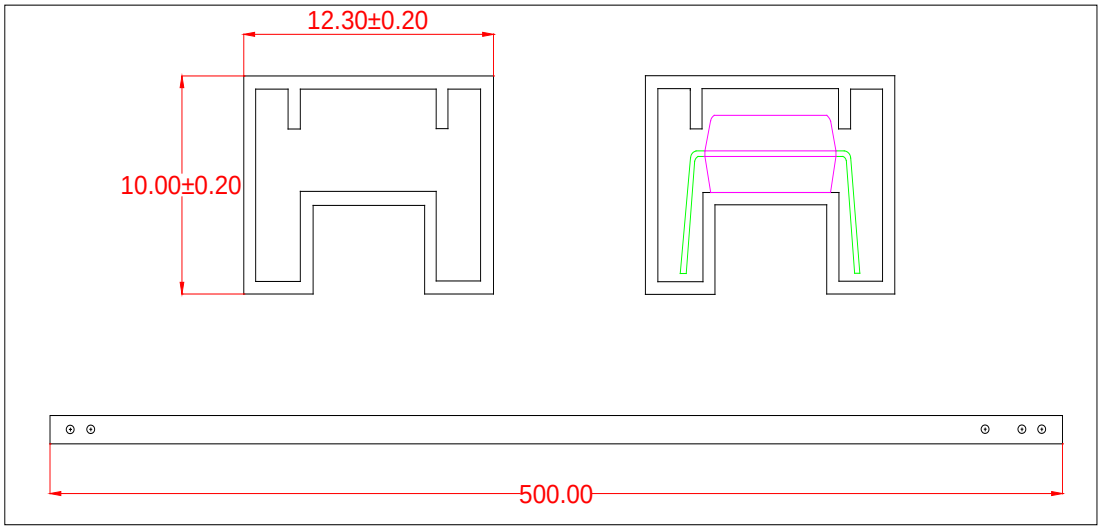
RECOMMENDED SOLDER MASK (Dimensions in mm unless otherwise stated)

Option S/SL

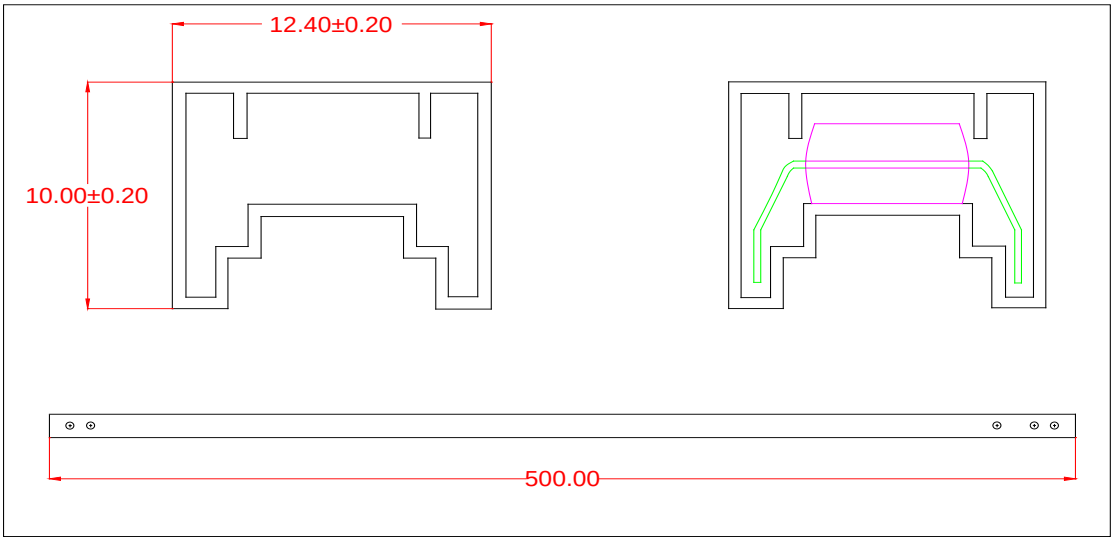


TUBE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

Standard DIP



Option M

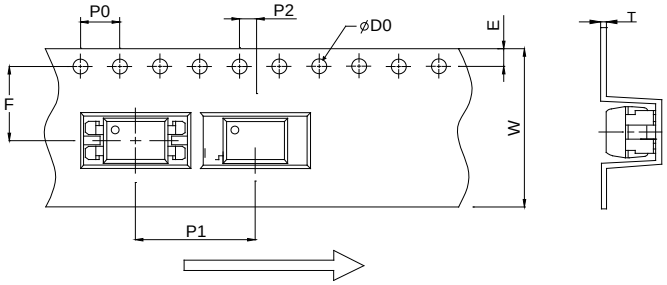


CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

Option S(T1)

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
D0		1.50			0.059	
P0		4.00			0.157	
P1		8.00			0.315	
P2		2.00			0.079	
E		1.75			0.069	
F		7.50			0.295	
T		0.40			0.016	
W		16.00			0.630	

Option SL(T3)



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
D0		1.50			0.059	
P0		4.00			0.157	
P1		12.00			0.472	
P2		2.00			0.079	
E		1.75			0.069	
F		7.50			0.295	
T		0.40			0.016	
W		16.00			0.630	

REFLOW INFORMATI8w3aE6

Document Revision History

Date	Revision	Changes
Apr.2, 2025	A.1.0	Last update
Nov.5, 2025	A.1.1	Add SLM package