



JOCT101X-L4 Series

Rev.A.1.0

DESCRIPTION:

The products are transistor opto-couplers in a plastic LSOP4 package. The device combines an AlGaAs infrared emitting diode as the emitter which is optically coupled to a silicon planar phototransistor detector. With the robust coplanar double mold structure, the device provides the most stable isolation feature. The products are widely used in switch mode power supplies, programmable controllers, household appliances, office equipment, etc.

MAIN FEATURES

High isolation 5000 VRMS
DC input with transistor output
Operating temperature range -55°C to 110°C
RoHS & REACH Compliance
HBM: H3A ; MM: M4; CDM:C3
CQC approved
VDE approved
UL approved

ABSOLUTE MAXIMUM RATINGS (Temperature=25°C)

Parameter	Symbol	Value	Unit
Forward Current	I _F		
Input			

Storage Temperature	T_{stg}	-55~+125	
Soldering Temperature	T_{sol}	260	

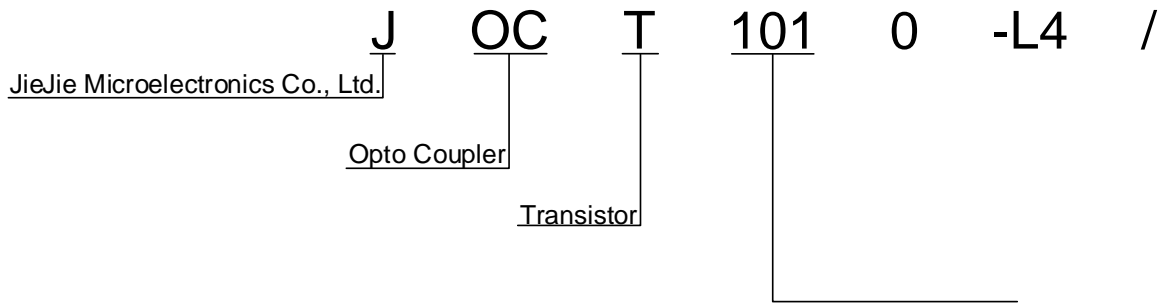
NOTE1: 100 μ s pulse, 100Hz frequency

NOTE2 AC for 1minute, R.H.=40~60%

ELECTRICAL CHARACTERISTICS (Temperature=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Input	Forward Voltage	V_F	$I_F=10mA$	-	1.2	1.5	V
	Reverse Current	I_R	$V_R=6V$	-	-	1	μA

ORDERING INFORMATION



Characteristics Curves

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

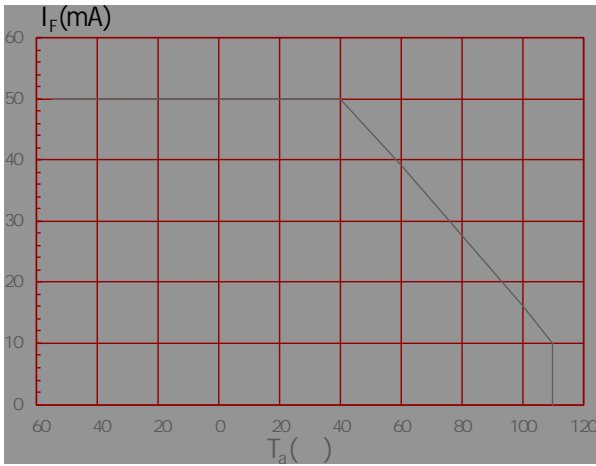


FIG.2: Collector Power Dissipation vs. Ambient Temperature

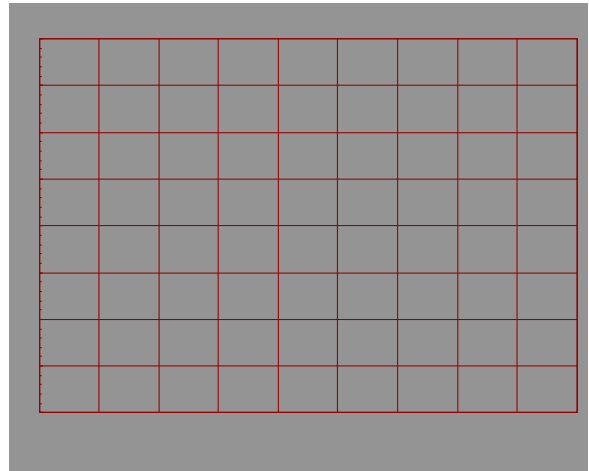




FIG.7: Normalized Current Transfer Ratio vs.
Ambient Temperature

FIG.8: Normalized Collector-emitter Saturation
Voltage

Test Circuits

FIG.11: Test Circuits of Response Time

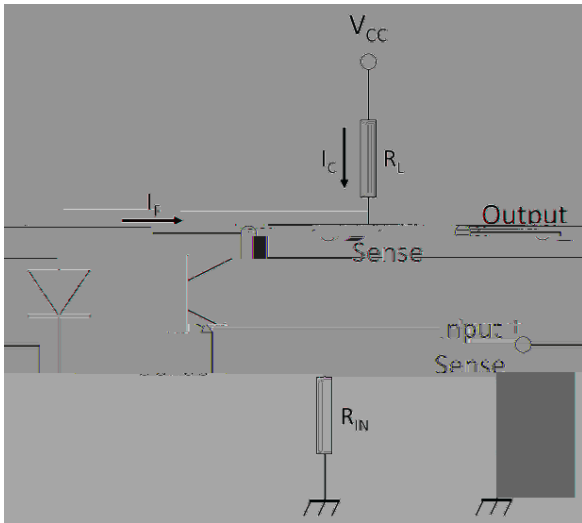


FIG.12: Curves of Response Time

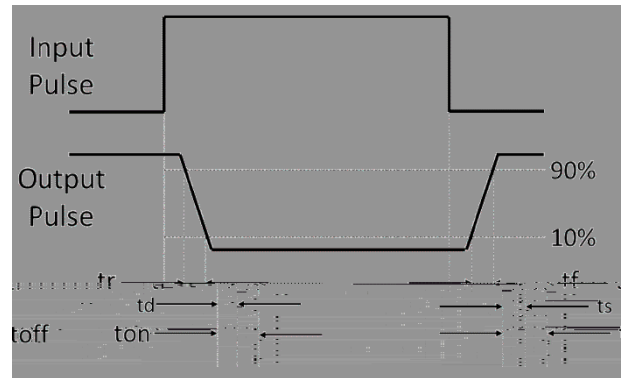
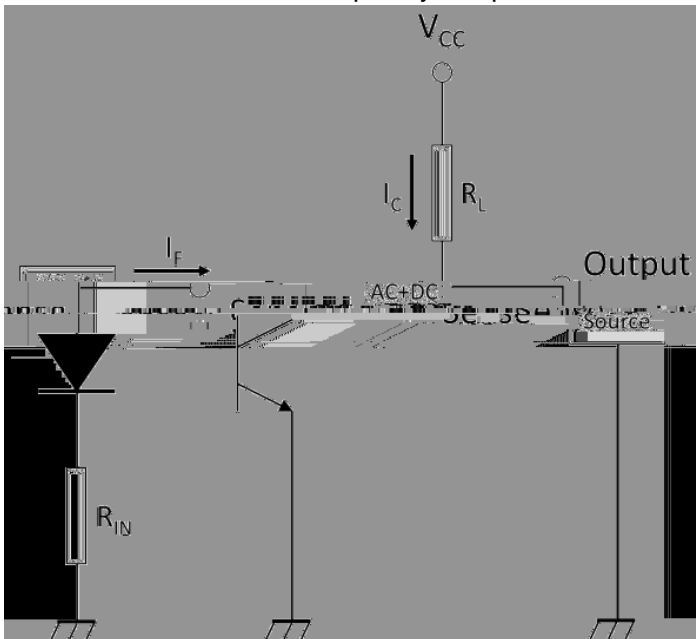
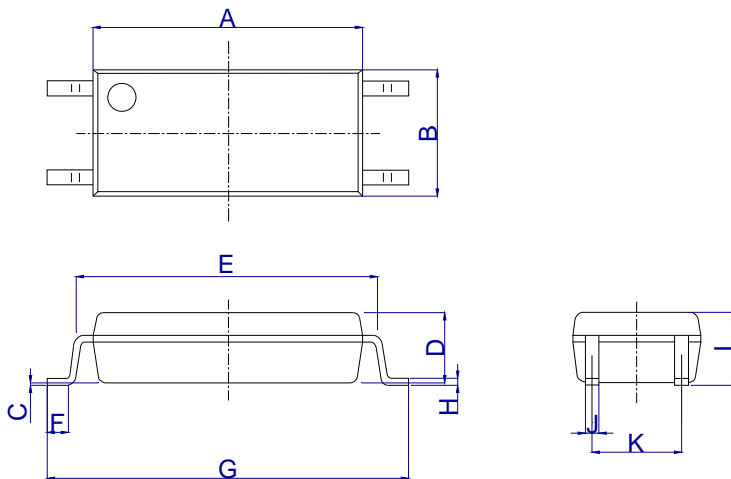


FIG.13: Test Circuits of Frequency Response

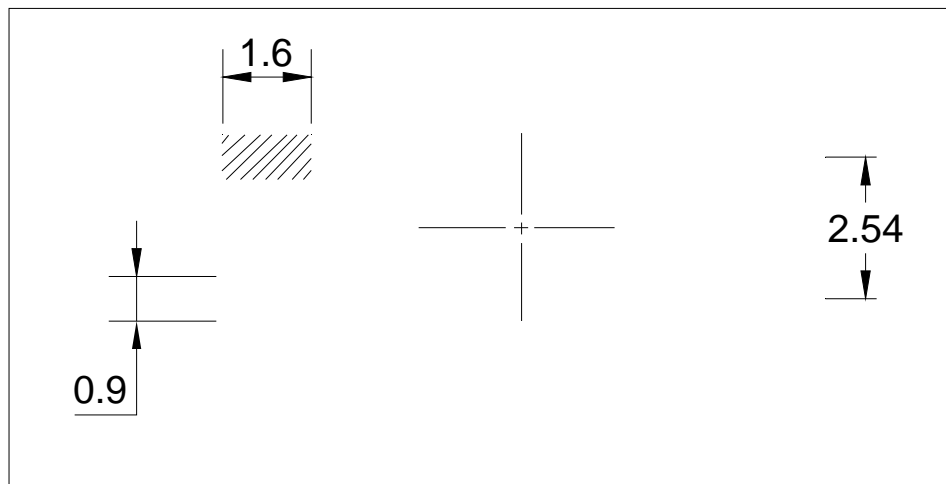


Package Dimension (Unit: mm)



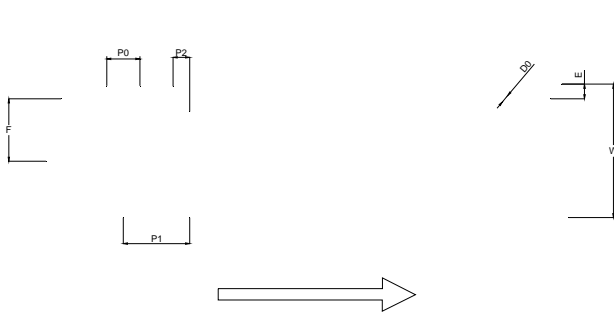
Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	7.40		7.80	0.291		0.307
B	3.40		3.80	0.134		0.150
C	0.00		0.20	0.000		0.008
D	1.80		2.20	0.071		0.087
E	8.10		8.70	0.319		0.343
F	0.40		1.00	0.016		0.039
G	9.90		10.50	0.390		0.413
H	0.10		0.30	0.004		0.012
I	1.80		2.40	0.071		0.094
J	0.25		0.55	0.010		0.022
K	2.29		2.79	0.090		0.110

RECOMMENDED SOLDER MASK (Dimensions in mm unless otherwise stated)



CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

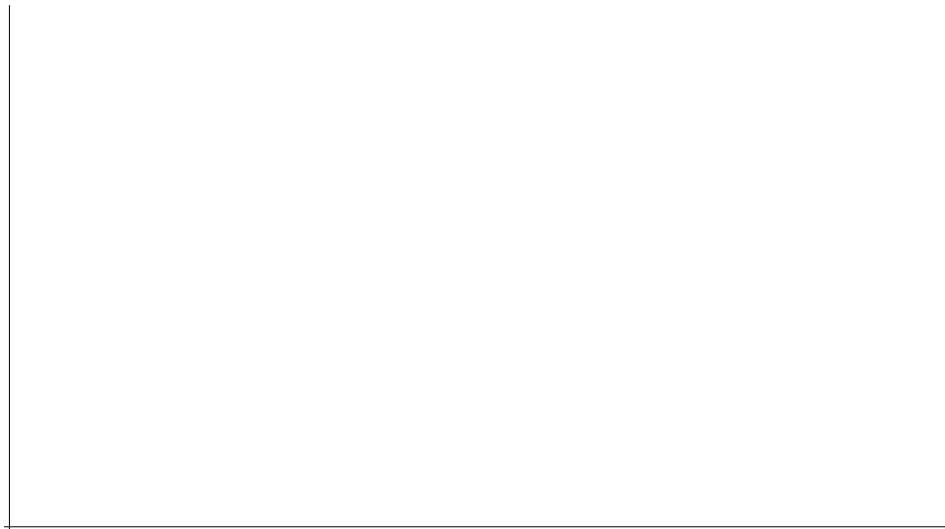
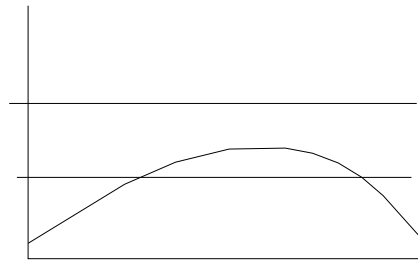
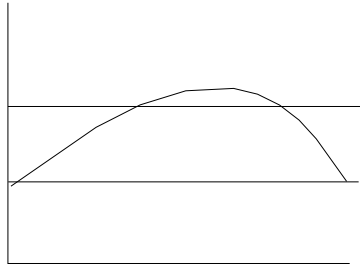
Option None/R



TT^T

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
D0			1.60			0.063
P0	3.90		4.10	0.154		0.161
P1			8.10			0.319
P2	1.90		2.10	0.075		0.083
E	1.65		1.85	0.065		0.073
F	7.40		7.60	0.291		0.299
T	0.35		0.45	0.014		0.018
W	15.80		16.20	0.622		0.638

REFLOW INFORMATION



Note:

1. Reflow soldering is recommended at the temperatures and times shown, no more than three times.
2. Avoid direct contact between the epoxy body and any tools or surfaces exceeding its maximum