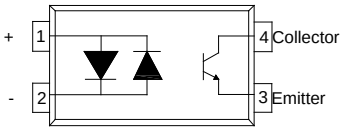
JOC3H4X Series

Rev.A.1.0

DESCRIPTION:

The products are transistor opto-couplers in a SSOP4 package. The device is a photoelectric coupler composed of light-emitting diode and phototransistor. The products are widely used in switching power supply, intelligent meter, industrial control, measuring instruments, office equipment such as copiers, household appliances: such as air conditioners, fans, water heaters,etc.





MAIN FEATURES

High isolation 3750 VRMS
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
Input	Forward Current	I_F	±50	mA
	Peak Forward Current	I_{FP}	1	A
	Power Dissipation	P_D	75	mW
Output	Collector-emitter Voltage	V_{CEO}	80	V
	Emitter-collector Voltage	V_{ECO}	7	V
	Collector Current	I_C	50	mA
	Power Dissipation	P_C	150	mW
Total Power Dissipation		P_{tot}	225	mW
Isolation Voltage		V_{iso}	3750	Vrms
Operating Temperature		T_{opr}	-55~+110	
Junction Temperature		T_j	125	
Storage Temperature		T_{stg}	-55~+125	
Soldering Temperature		T_{sol}	260	

NOTE1 1 s pulse **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
	Terminal Capacitance	C_t	V=0, f=1MHz	-	30	250	pF
Output	Collector-Emitter dark current	I_{CEO}	V_{CE}=20V, I_F=0	-	-	50	nA
	Collector-Emitter breakdown voltage	BV_{CEO}	I_C=0.1mA I_F=0	80	-	-	V
	Emitter-Collector breakdown voltage	BV_{ECO}	I_E=0.1mA I_F=0	7	12.9	0	

JOC3H4X

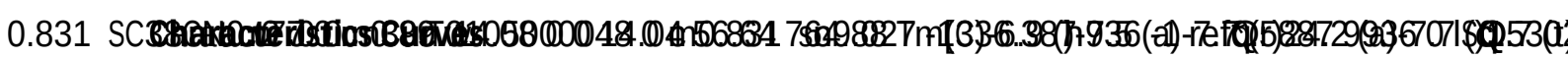


FIG.1: Max. Allowable LED Forward Current vs. Ambient Temperature

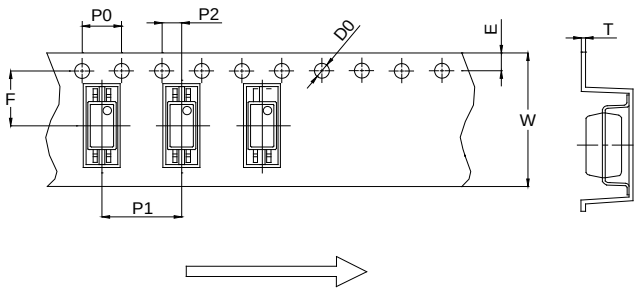
FIG.2: Collector Power Dissiption vs. Ambient Temperature

Package Dimension (Unit: mm)



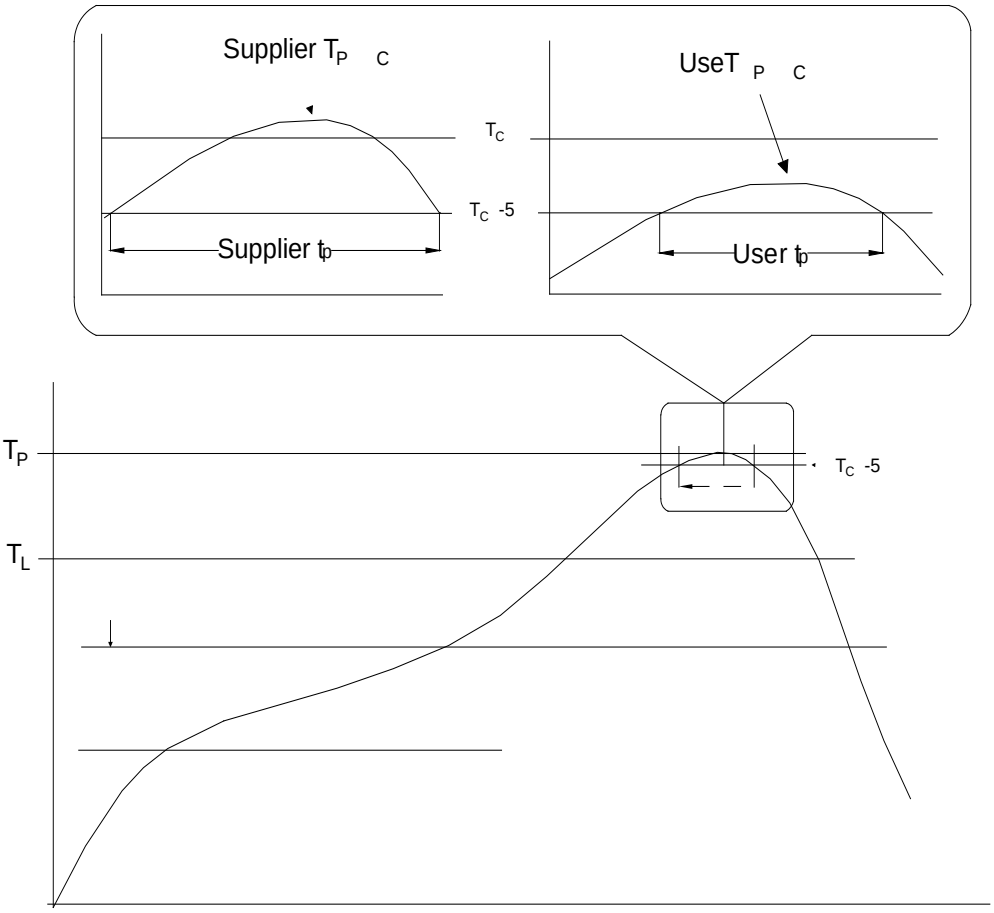
CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

Option T1



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
D0		1.50	1.60		0.059	0.063
P0	3.90		4.10	0.154		0.161
P1	7.90		8.10	0.311		0.319
P2	1.90		2.10	0.075		0.083
E	1.65		1.85	0.065		0.073
F	5.40		5.60	0.213		0.220
T	0.20		0.30	0.008		0.012
W	11.90		12.30	0.469		0.484

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 storage temperatur.1.R