CNY17F-X Series

Rev.A.1.0

DESCRIPTION:

The CNY17F-X series combine an AIGaAs infrared emitting diode as the emitter which is optically coupled to a silicon planar phototransistor detector in a plastic DIP6 package with different lead forming options. The products are widely used in switch mode power supplies, programmable controllers, household appliances and office equipment.

MAIN FEATURES

High isolation 5000 VRMS
CTR flexibility available see order information
DC input with transistor output
Operating temperature range -55°C to 110°C
REACH compliance
Halogen free
CQC approved
VDE approved
UL approved

ABSOLUTE MAXIMUM RATINGS (Temperature=25°C)

Parameter		Symbol	Value	Unit
Input	Forward current	I_F	60	mA
	Peak forward current	I_{FP}	1	A
	Reverse voltage	V_R	6	V
	Power dissipation	P_D	100	mW
Output	Collector-emitter Voltage	V_{CEO}		

Soldering Temperature	T_{sol}	260	

NOTE1: μ

NOTE2:

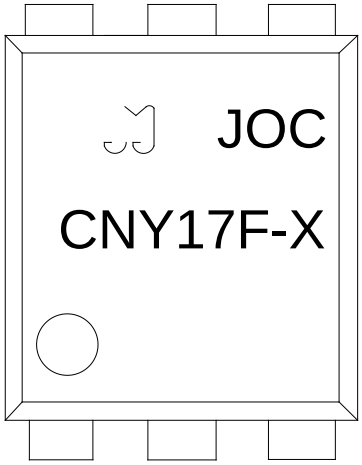
ELECTRICAL CHARACTERISTICS (Temperature=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Input	Forward Voltage	V_F	I_F=10mA	-	1.27	1.4	V
			I_F=20mA	-	1.33	1.5	
	Reverse Current	I_R	V_R=6V	-	-	1	μA
	Input Capacitance	C_{in}	V=0, f=1MHz	-	10	-	pF
	Collector-Emitter dark current	I_{CEO}	V_{CE}=20V, I_F				

Output

ORDERING AND MARKING INFORMATION

MARKING INFORMATION



Characteristics Curves

FIG.1: Forward Current vs. Ambient Temperature

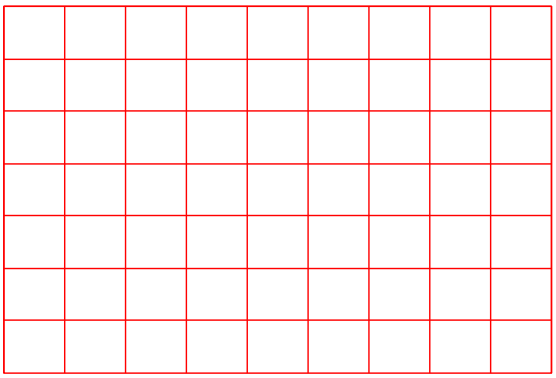


FIG.2: Collector Power Dissiption vs. Ambient Temperature

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

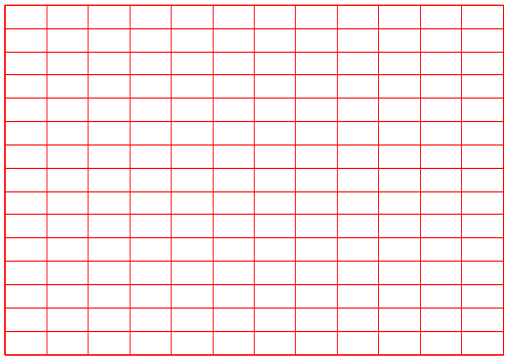
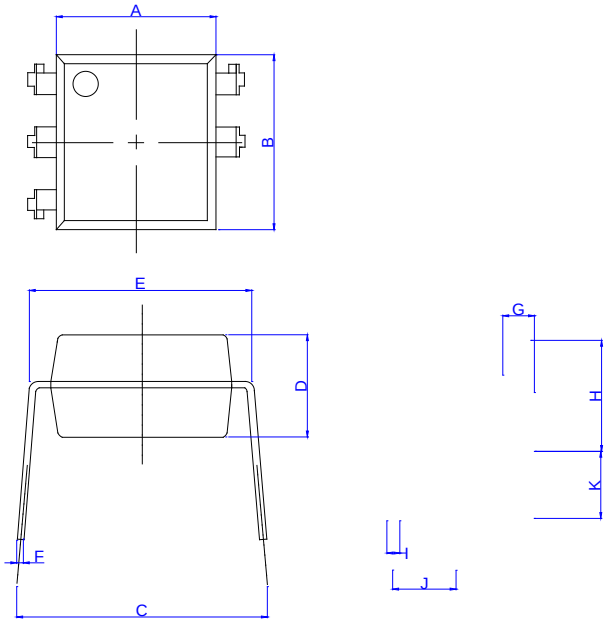


FIG.8: Normalized Collector-emitter Saturation Voltage vs. Ambient Temperature

CNY17F-X

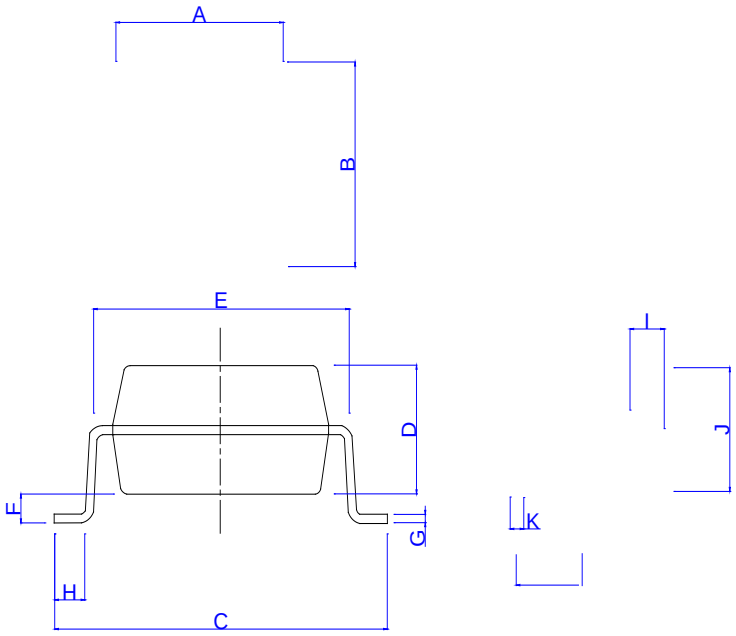
Package Dimension (Unit: mm

Standard DIP Type:



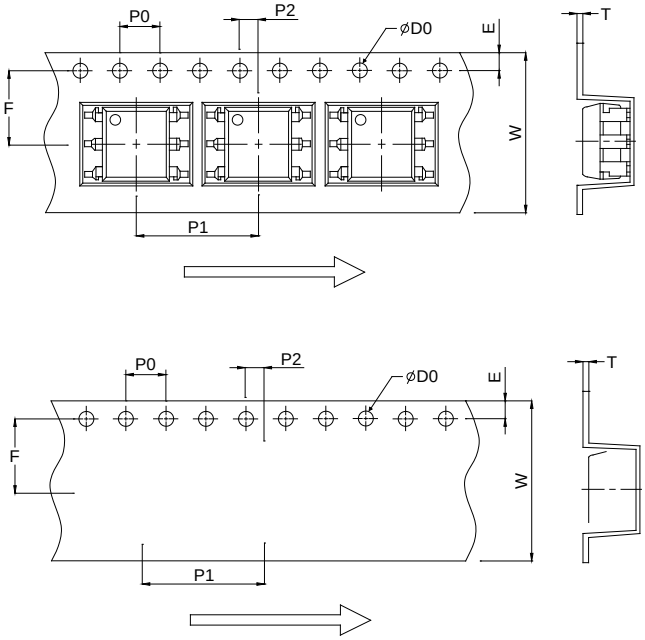
Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	6.00		7.00	0.237		0.277
B	6.62		7.62	0.262		0.301
C	7.10		10.16	0.281		0.402
D	3.00		4.00	0.119		0.158
E	7.32		7.92	0.289		0.313
F						
G	0.90		1.50	0.036		0.059
H	3.50		4.80	0.138		0.190
I						
J						
K						

Option S Type:



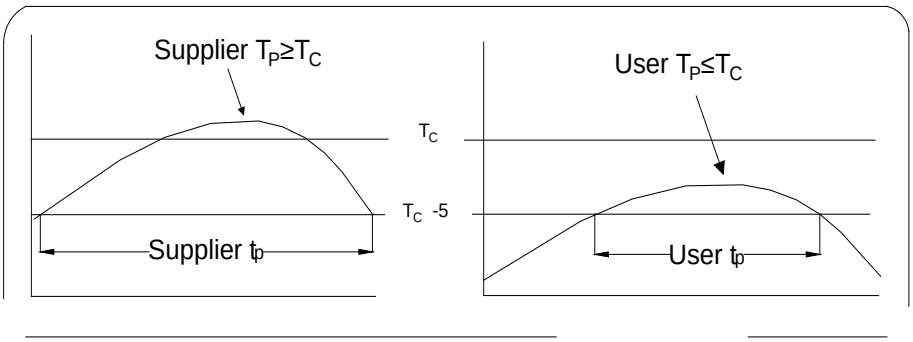
CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

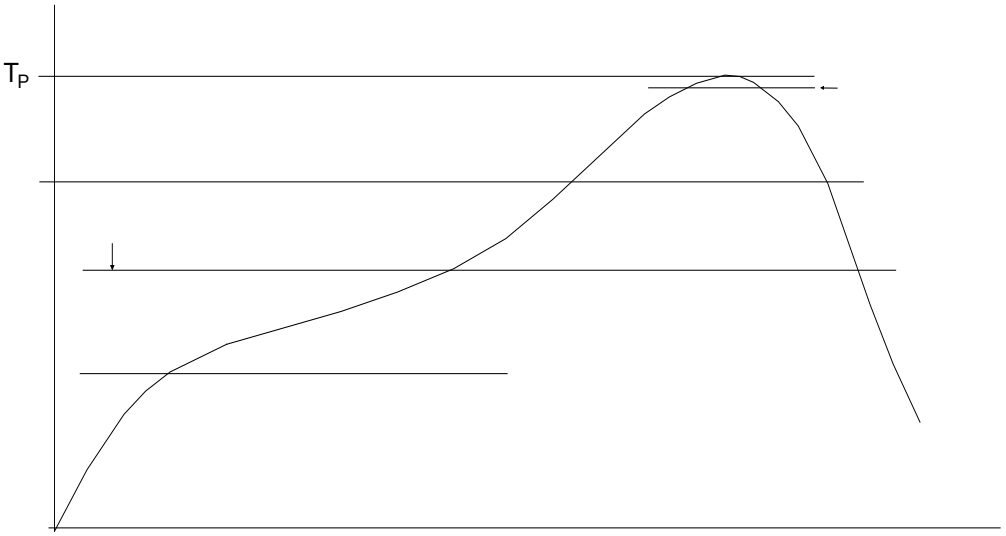
Option S(T1)



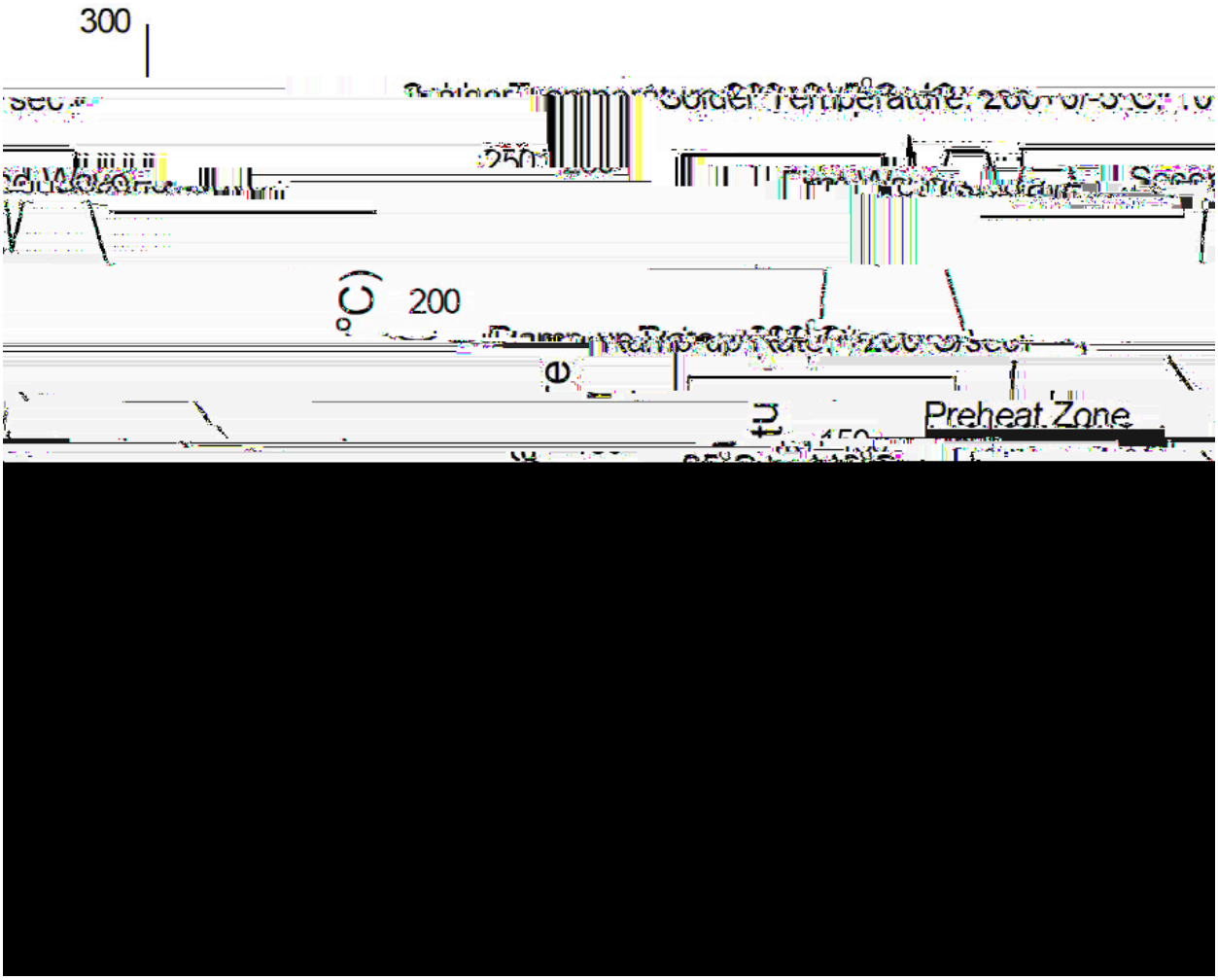
Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
D0		1.50	1.65		0.059	0.065
P0	3.90	4.00	4.10	0.154	0.157	0.161
P1	11.90	12.00	12.10	0.469	0.472	0.476
P2	1.90	2.00	2.10	0.075	0.079	0.083
E	1.65	1.75	1.85	0.065	0.069	0.073
F	7.40	7.50	7.60	0.291	0.295	0.299
T	0.25	0.35	0.45	0.010	0.014	0.018
W	15.70	16.00	16.30	0.618	0.630	0.642

REFLOW INFORMATION





WAVE SOLDERING



HAND SOLDERING BY SOLDERING IRON	
Soldering Temperature	360 ± 5
Soldering Time	3s max.

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 temperatures.oolsp and any tur 0 1anage t and av5 (g i)-mm (c)1 (e)-5 (l)-n o[(1.(e)11p,)6.3 (n ( )] (ool)-46.3