

DIP4, DC Input, Photo Transistor Coupler

Description

I I 9- , h g h X Wc Vc V h c g/g Y
 c Y Y Vh gl X h XVn
 X Y Vh X c VcVg g/ch h g
 Y X g c V Vh X9 E) VX V I Y g c
 VY g c ch
 L g Wh X VcVgY W Yh g X g
 I 9- , h g h g kY h h VW h V c
 V g

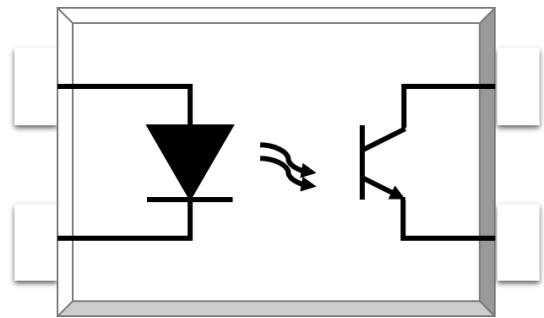
Features

= h V c %%% B
 8l mW n V k V W h g' g
 c g V c
 98 c I g/ch h g
 D g/ c g/ g g/c 8
 % 8
 : 8= X VcX
 =V c g
 B AXVhh
 V gn g kVh
 A A , ,
 9: : C+%), □ 9: %-)
 8 8))(-- -

Applications

- I X Y I gh h
- Eg g/ VW X c g gh
- = h YV VcX h
- D X f c

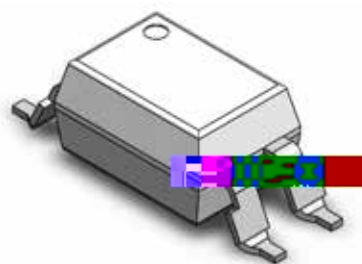
SCHEMATIC



PIN DEFINITION

1. Anode
2. Cathode
3. Emitter
4. Collector

PACKAGE OUTLINE



DIP4, DC Input, Photo Transistor Coupler

ABSOLUTE MAXIMUM RATINGS					
E	B:I:	NB DA	A :	CI	CDI :
CE I					
g VgY8 gg c			+%		
E V	g VgY8 gg c	E			
k gh V			+		
c	E I g9 hh V c	E	%%	L	
D I E I					
8	X g : g V	8: D	(
:	g 8 X g V	: 8D	,		
8	X g8 gg c	8	%		
D	E I g9 hh V c	ED	%	L	
8DBBDC					
I	VE I g9 hh V c	E	%%	L	
h	V c V	h	%%%	g h	
D	gV c I gV g	I g	s %	8	
	gV I gV g	I h	s	8	
Y	gc I gV g	I h	+%	8	

std 7 722 r rd! 722 d d
 std 4 7 std! 02 22

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ELECTRICAL OPTICAL CHARACTERISTICS at Ta=25°C

E	B:I:	NB DA	B C	INE	B M	CI	I: I 8DC9 I DC	CDI:
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CE I

CHARACTERISTIC CURVES

Fig.1 Forward Current vs. Ambient Temperature

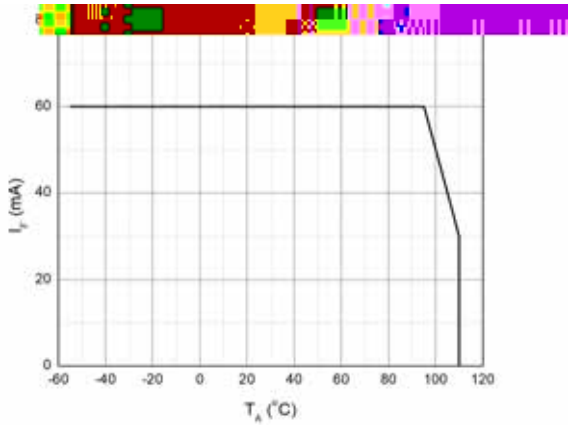


Fig.2 Collector Power Dissipation vs. Ambient Temperature

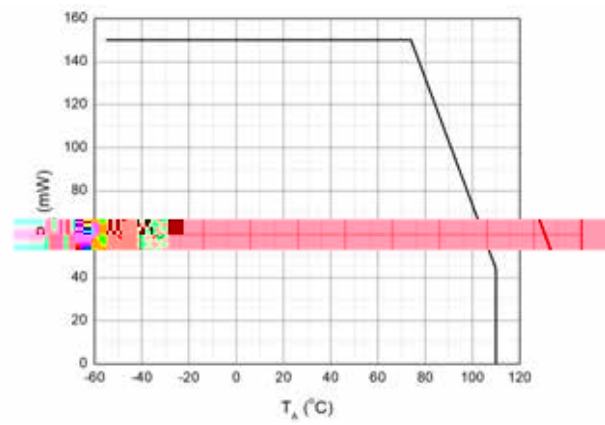


Fig.3 Forward Current vs. Forward Voltage

Fig.4 Collector Dark Current vs. Ambient Temperature

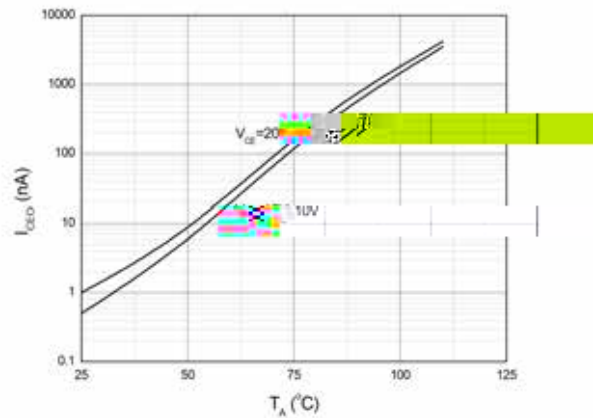
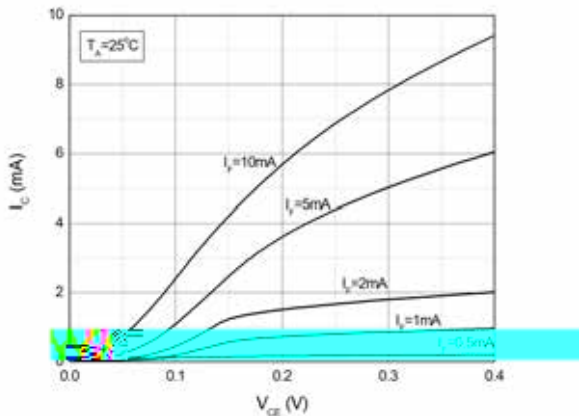


Fig.5 Collector Current vs. Collector-emitter Voltage

Fig.6 Collector Current vs. Collector-emitter Voltage



TD817 Series

TEST CIRCUITS

Fig.12 Test Circuits of Response Time

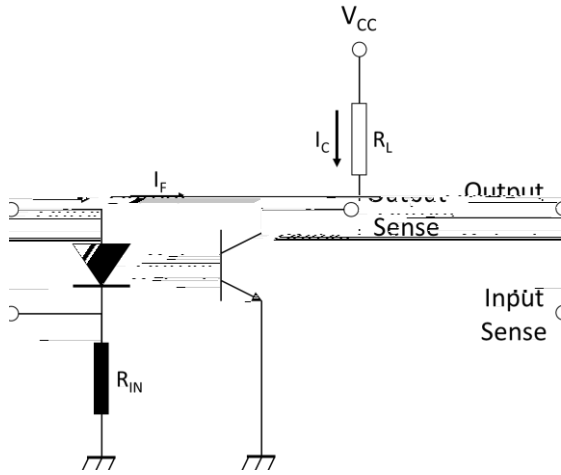


Fig.13 Curves of Response Time

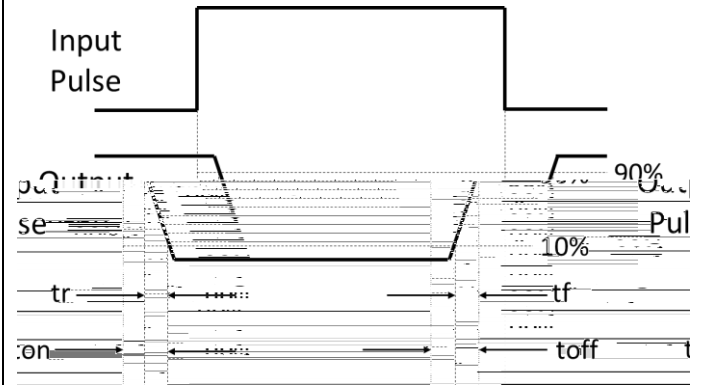
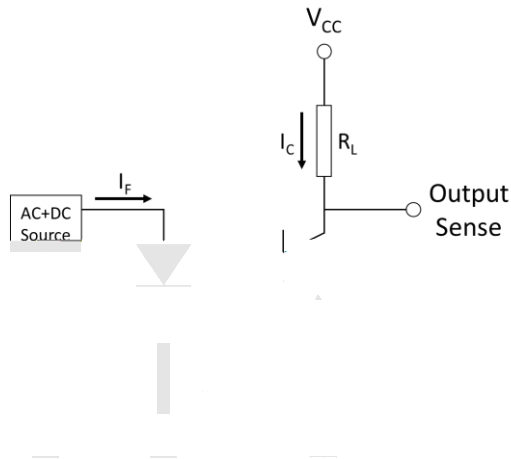


Fig.14 Test Circuits of Frequency Response



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PACKAGE DIMENSIONS Dimensions in mm unless otherwise stated)

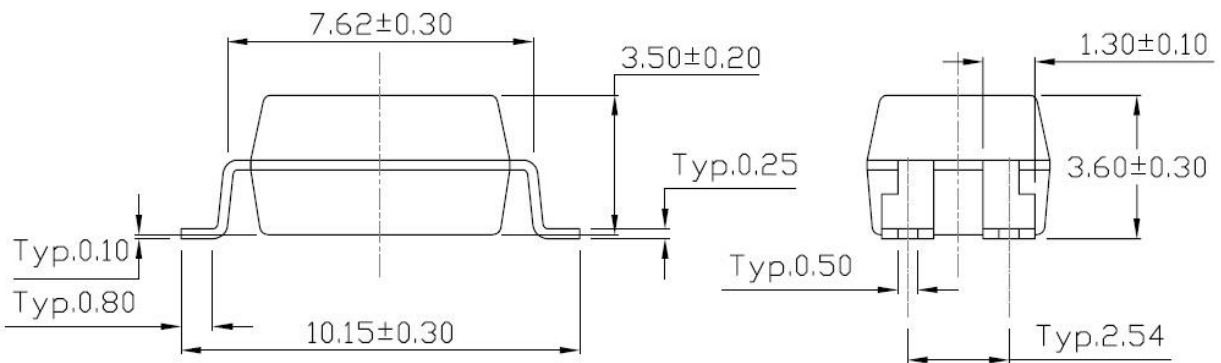
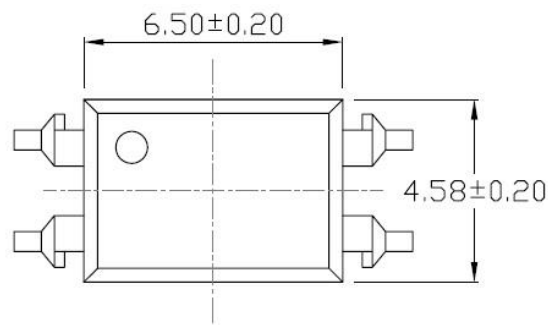
Standard DIP – Through Hole (DIP Type)

Gullwing (400mil) Lead Forming – Through Hole (M Type)

DIP4, DC Input, Photo Transistor Coupler

PACKAGE DIMENSIONS Dimensions in mm unless otherwise stated)

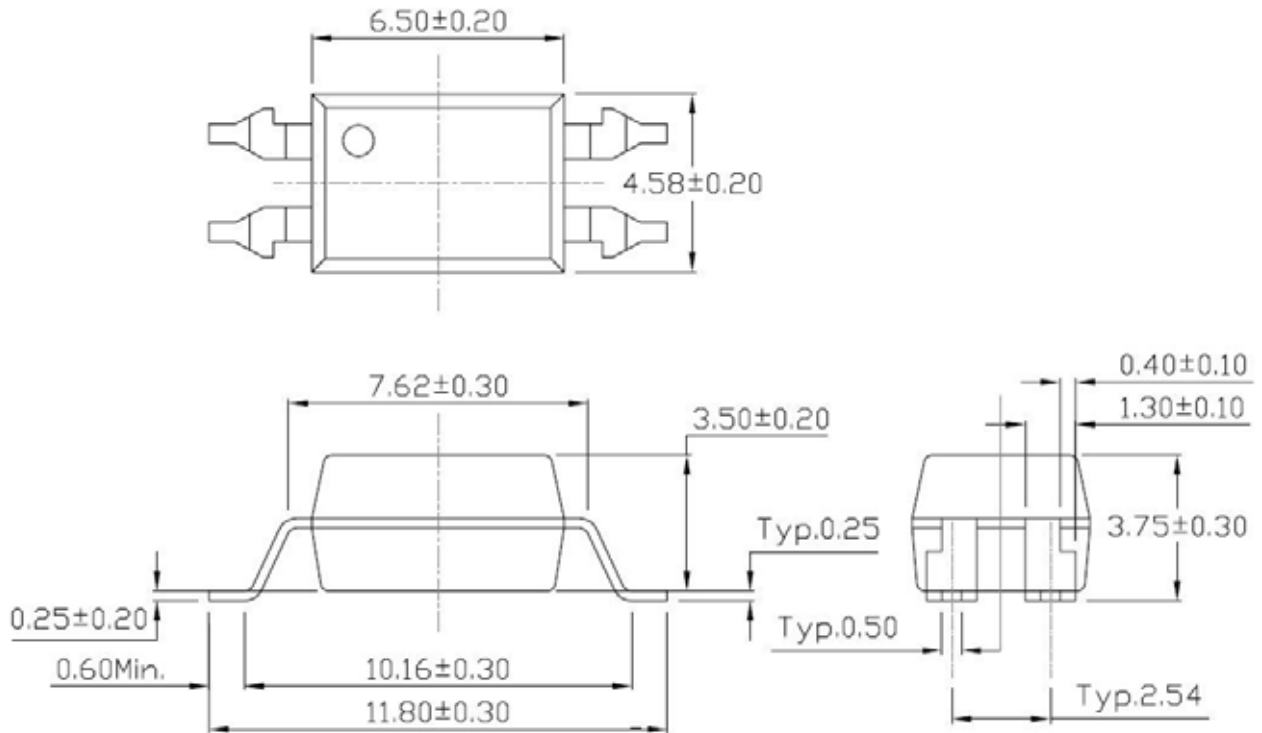
Surface Mount Lead Forming (S Type)



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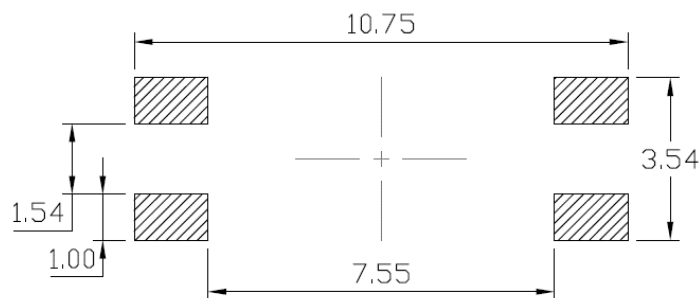
PACKAGE DIMENSIONS Dimensions in mm unless otherwise stated)

Surface Mount (Gullwing) Lead Forming (SLM Type)

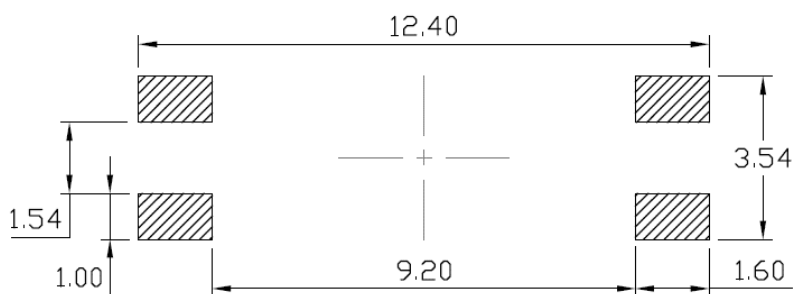


RECOMMENDED SOLDER MASK Dimensions in mm unless otherwise stated)

Surface Mount Lead Forming & Surface Mount (Low Profile) Lead Forming



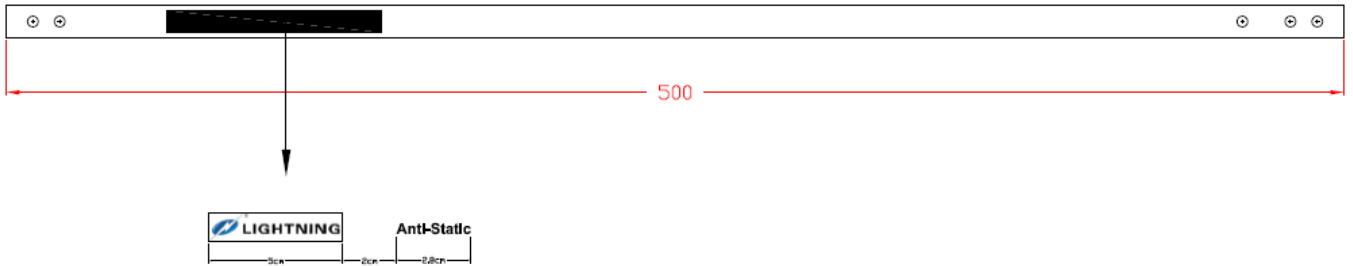
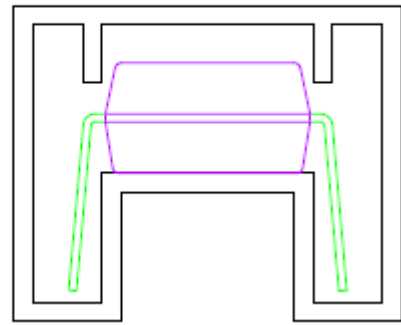
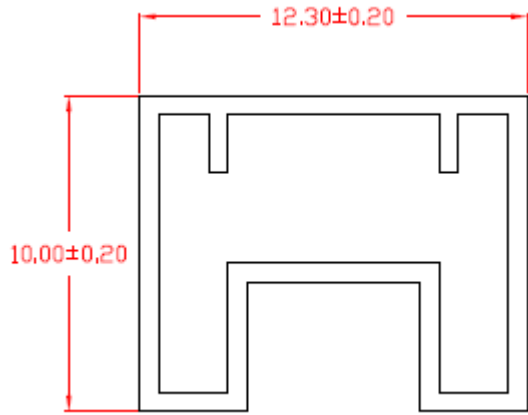
Surface Mount (Gullwing) Lead Forming



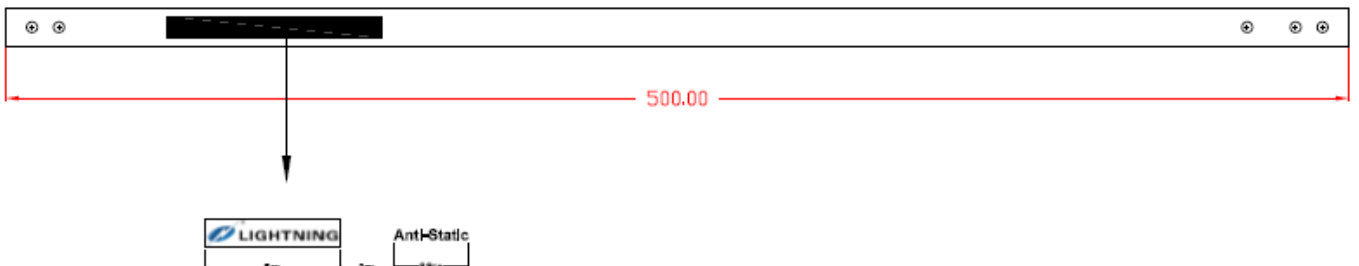
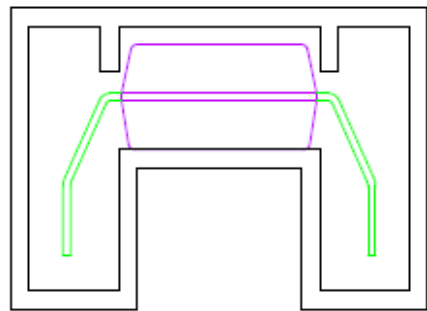
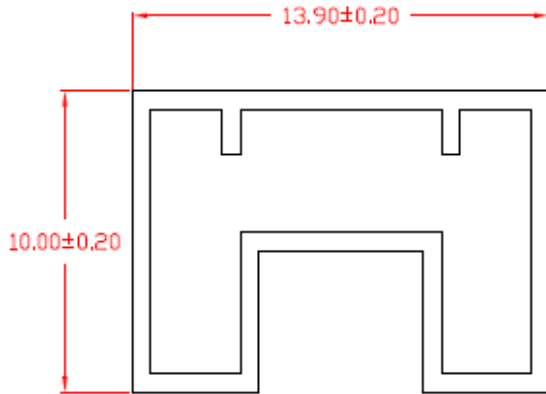
DIP4, DC Input, Photo Transistor Coupler

TUBE SPECIFICATIONS Dimensions in mm unless otherwise stated)

Standard DIP



Option M



DIP4, DC Input, Photo Transistor Coupler

BOX SPECIFICATIONS Tube Type)

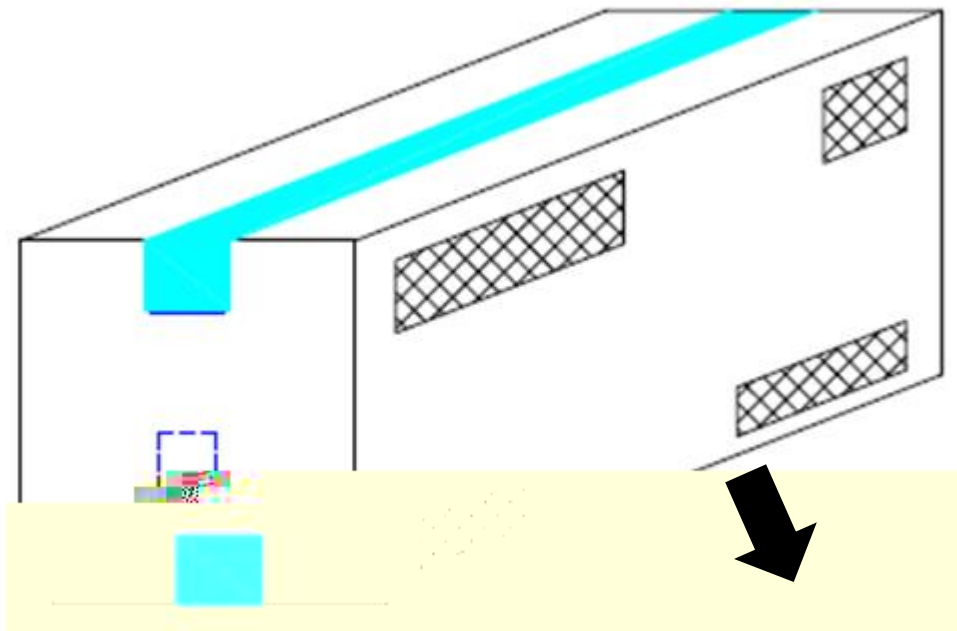
Inner Box

Label



141 723 03

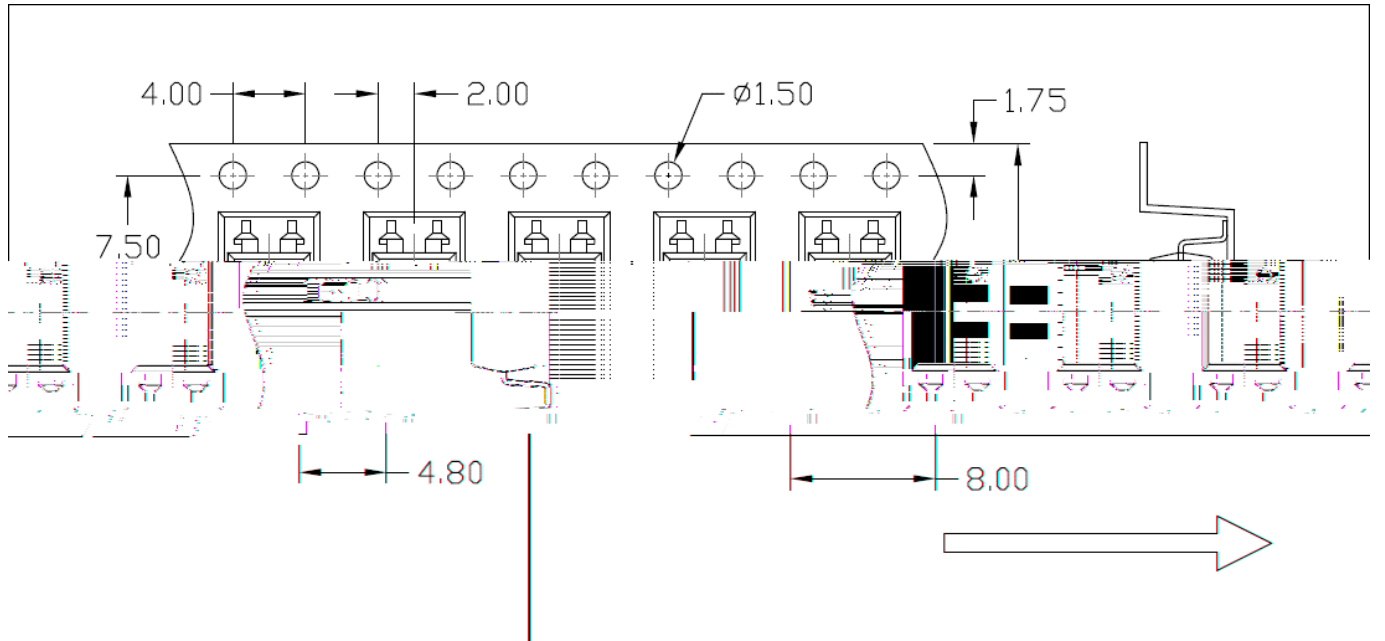
Outer Box



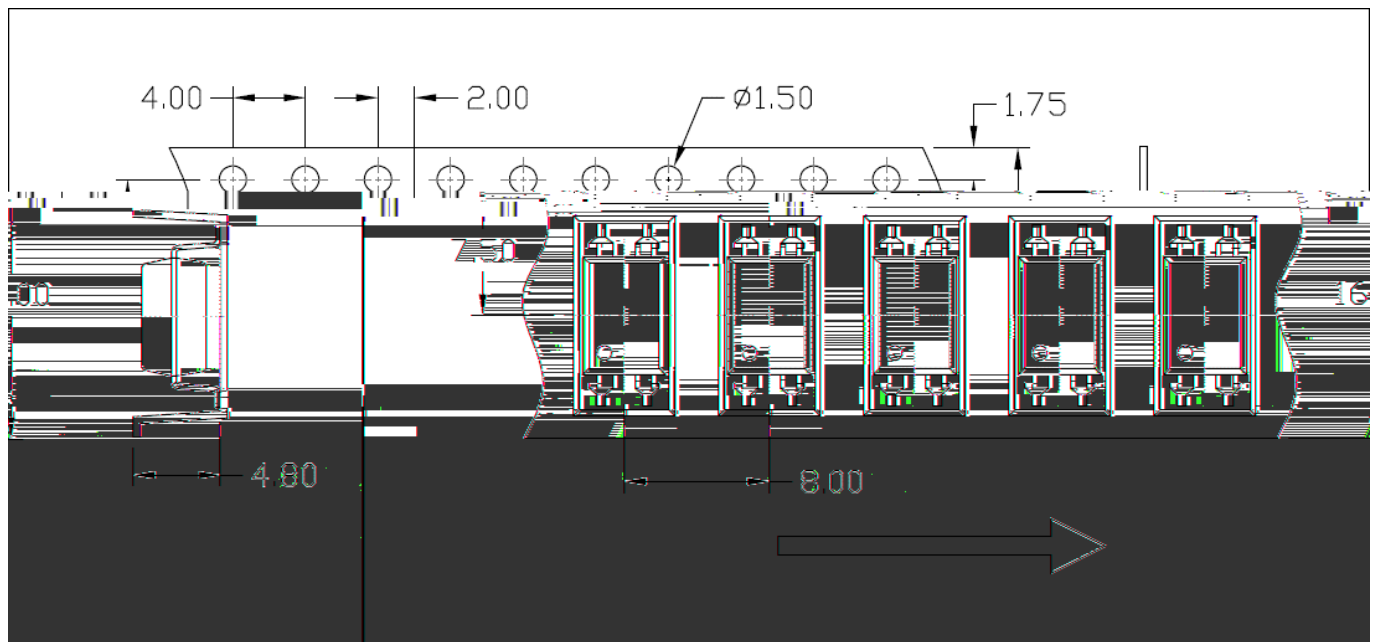
191 491 411

CARRIER TAPE SPECIFICATIONS Dimensions in mm unless otherwise stated)

Option S(T1) & SL(T1)

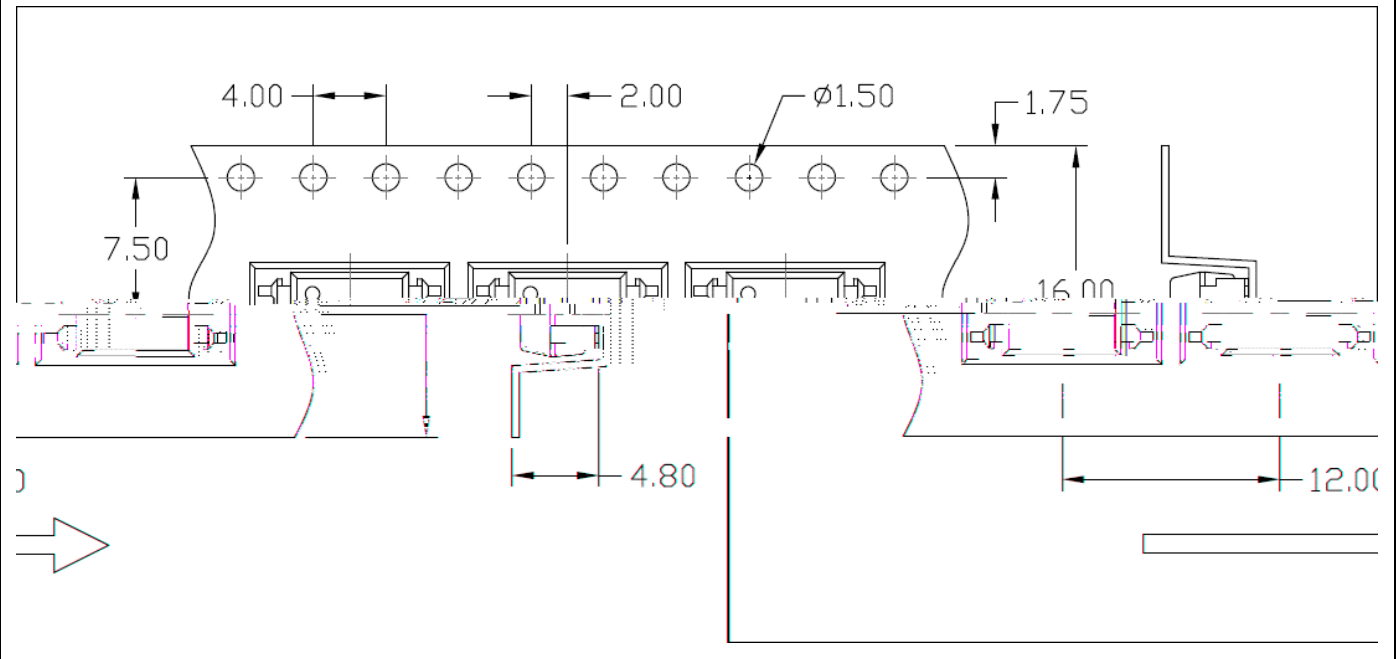


Option S(T2) & SL(T2)

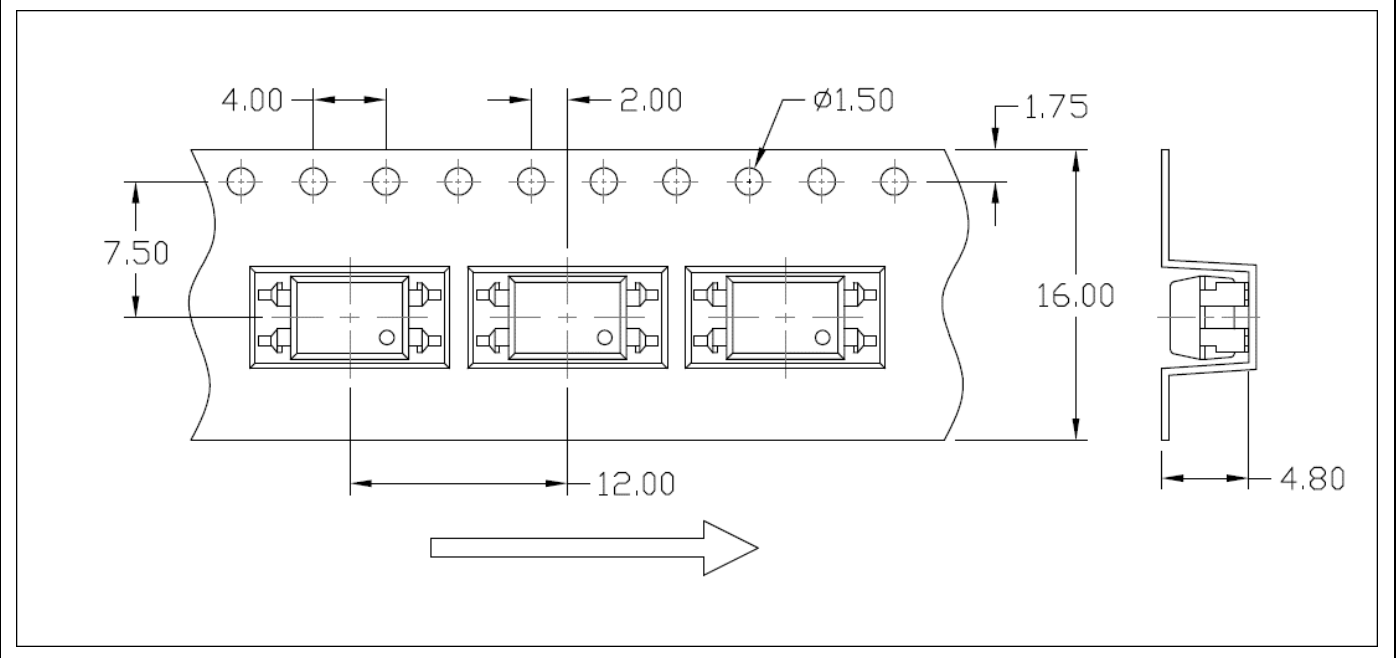


CARRIER TAPE SPECIFICATIONS Dimensions in mm unless otherwise stated)

Option S(T3) & SL(T3)

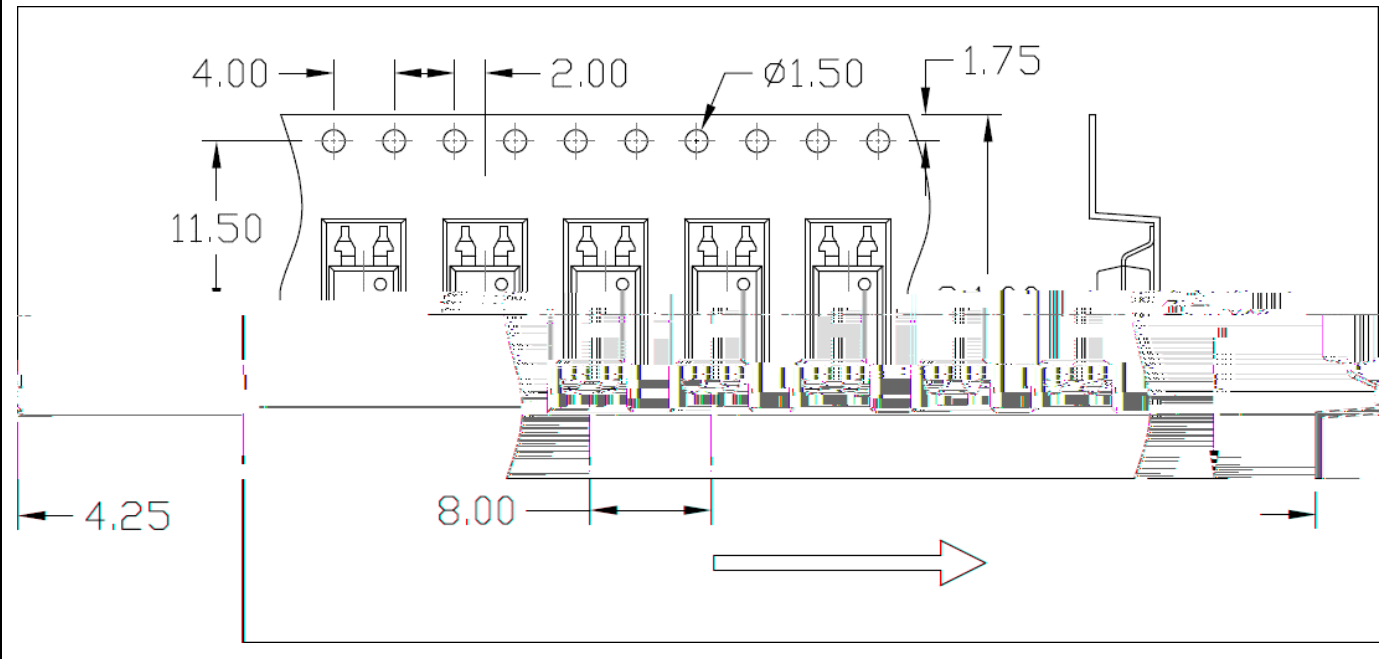


Option S(T4) & SL(T4)

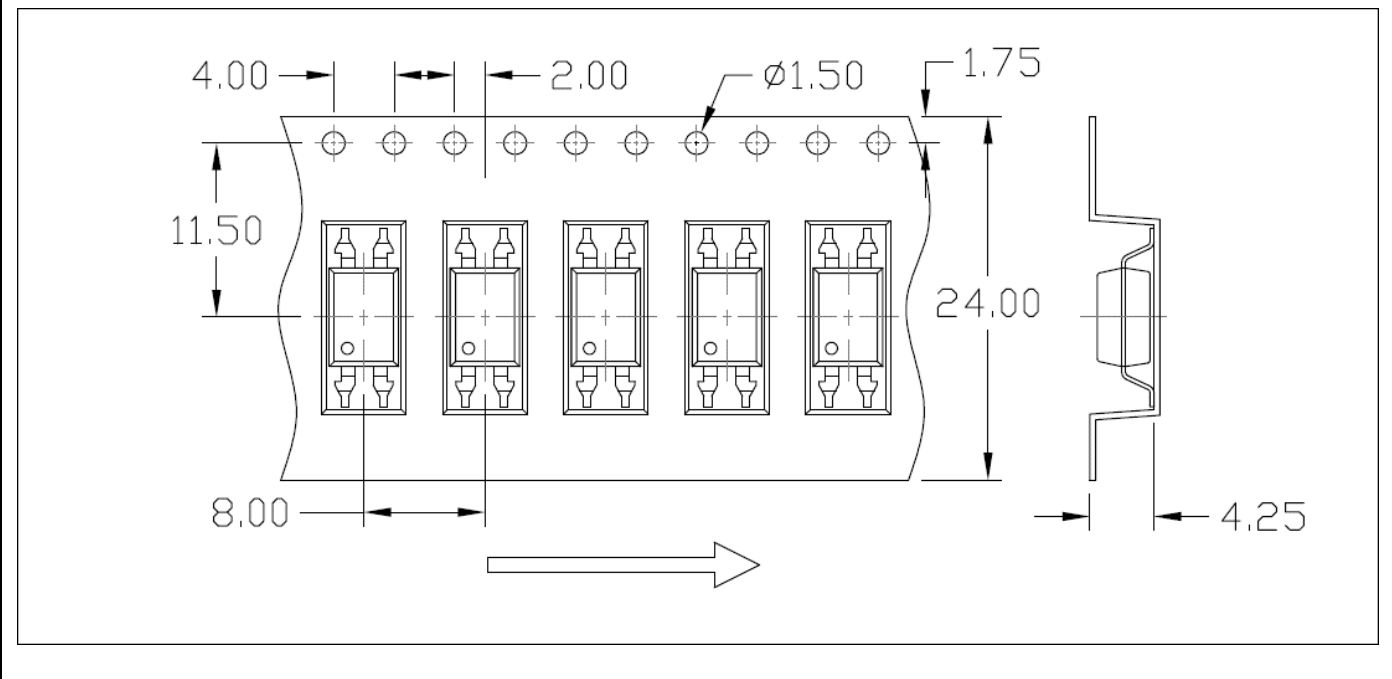


CARRIER TAPE SPECIFICATIONS Dimensions in mm unless otherwise stated)

Option SLM(T1)



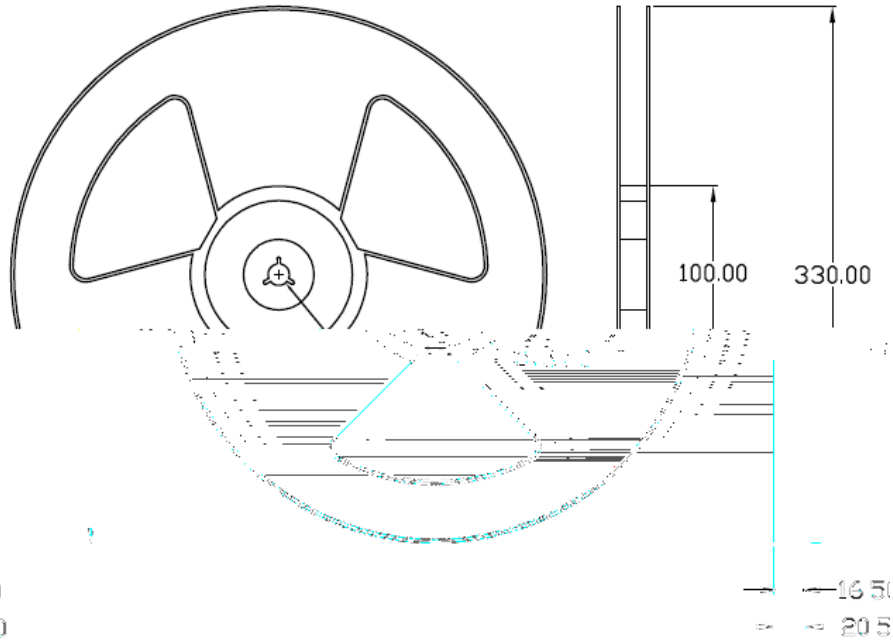
Option SLM(T2)



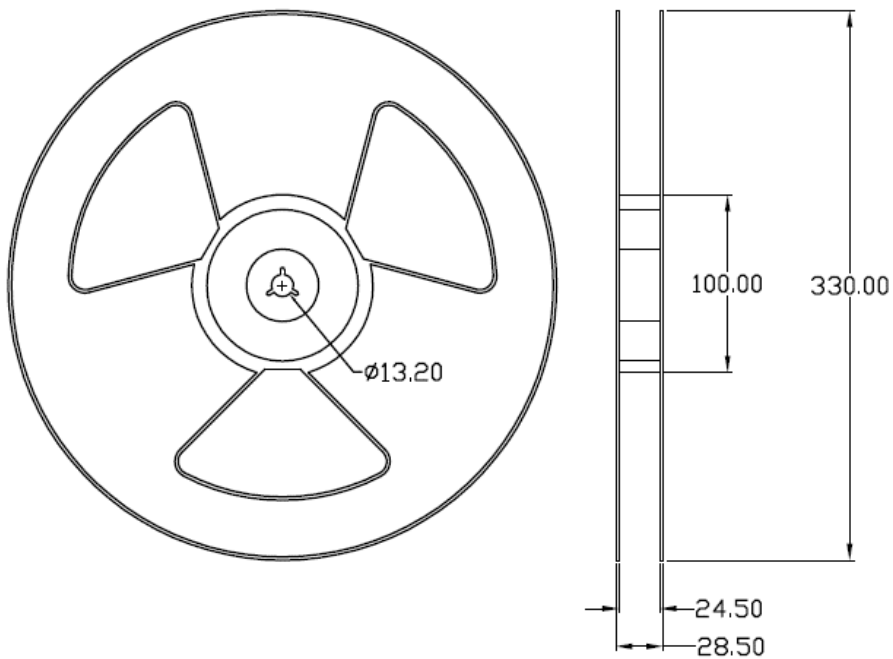
DIP4, DC Input, Photo Transistor Coupler

REEL SPECIFICATIONS Dimensions in mm unless otherwise stated)

Option S & Option SL



Option SLM

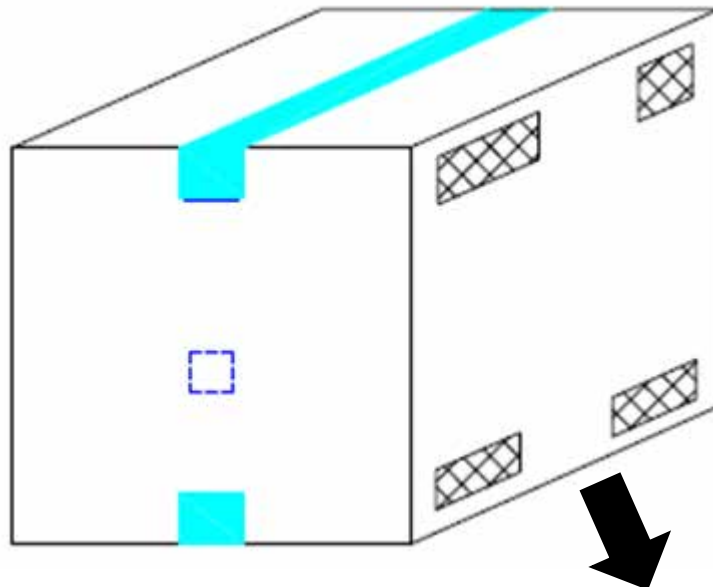


BOX SPECIFICATIONS (Reel Type)

Inner Box

92 92 25

Outer Box



01 94 94

DIP4, DC Input, Photo Transistor Coupler

ORDERING AND MARKING INFORMATION

MARKING INFORMATION

TD : Company Abbr.
F : Leadframe Option
817 : Part Number
X : CTR Rank
V : VDE Option
Y : Fiscal Year
A : Manufacturing Code
WW : Work Week

ORDERING INFORMATION

LABEL INFORMATION

TD817X(Y)(Z)-FGV

I 9 8 Vcn Wg
 - , EVg C Wg
 M Vc □ 8 9 : gC c
 N A Y g D c □ B A A B C c
 O I V VcY D c □ I I (I)
 A VYgV D c □ g c C c 8 g
 g c
 9 : D c □ gC c

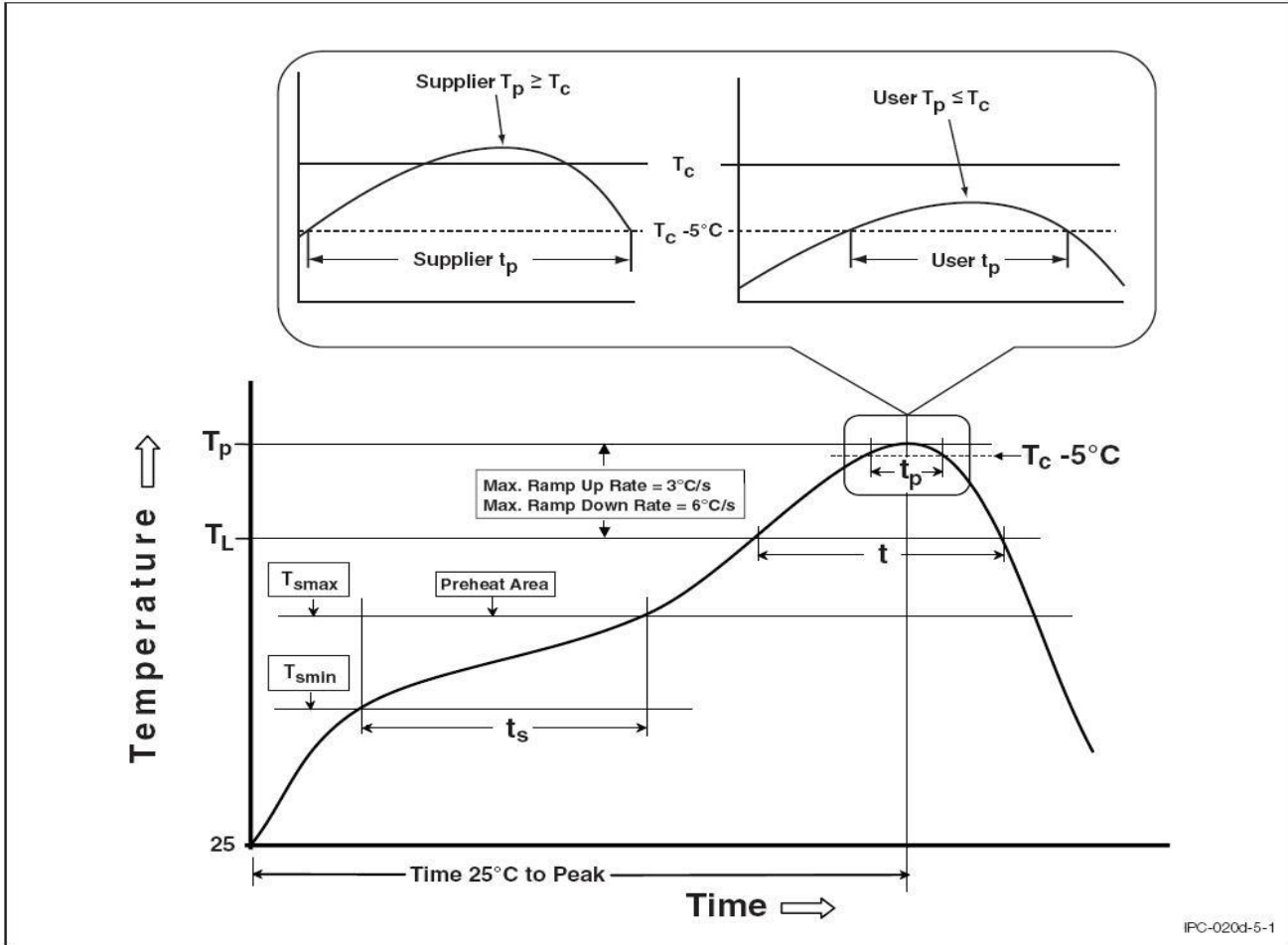
Packing Quantity

Option	Quantity	Quantity – Inner box	Quantity – Outer box
C c	%% c h l W	(l Wh cc gWm	% cc gWmD gWm2 (c h
B	%% c h l W	(l Wh cc gWm	% cc gWmD gWm2 (c h
□	%% c h	(h cc gWm	cc gWmD gWm2 c h

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REFLOW INFORMATION

REFLOW PROFILE



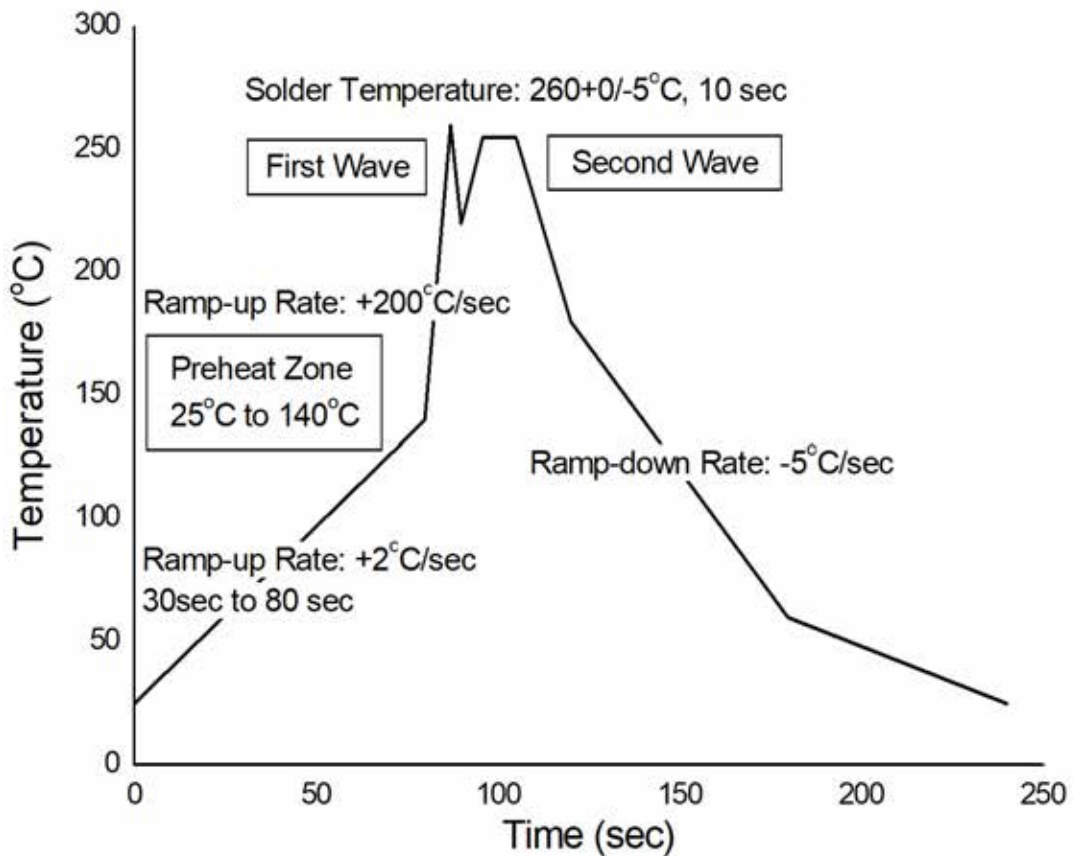
IPC-020d-5-1

Profile Feature	Sn-Pb Assembly Profile	Pb-Free Assembly Profile
I gV g B c I h c	%%	%8
I gV g B Vm I h Vm	%	%%8
I I h g I h c I h Vm	+% %h X cYh	+% %h X cYh
V V I A E	(8 h X cY Vm	(8 h X cY Vm
Af Y h I gV g I A	-(8	, 8
I I A B Vc Vc Y Wk I A	+% %h X cYh	+% %h X cYh
E V Yn EVX V I gV g	(8 %8 8	+%8 %8 8
I I E I c 8 +%8	%h X cYh	(%h X cYh
V Y I c V I E I A	+ 8 h X cY Vm	+ 8 h X cY Vm
I 8 E V I gV g	+ c h Vm	- c h Vm

DIP4, DC Input, Photo Transistor Coupler

TEMPERATURE PROFILE OF SOLDERING

WAVE SOLDERING (JESD22-A111 COMPLIANT)



HAND SOLDERING BY SOLDERING IRON

Y gc l gV g	(- % % 8
Y gc l	(h X Vm

- d st dr clal ft r d d clalch z r clal ft d st ch
- str clal d st z st dd st dr d r clal ft

TD817 Series
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