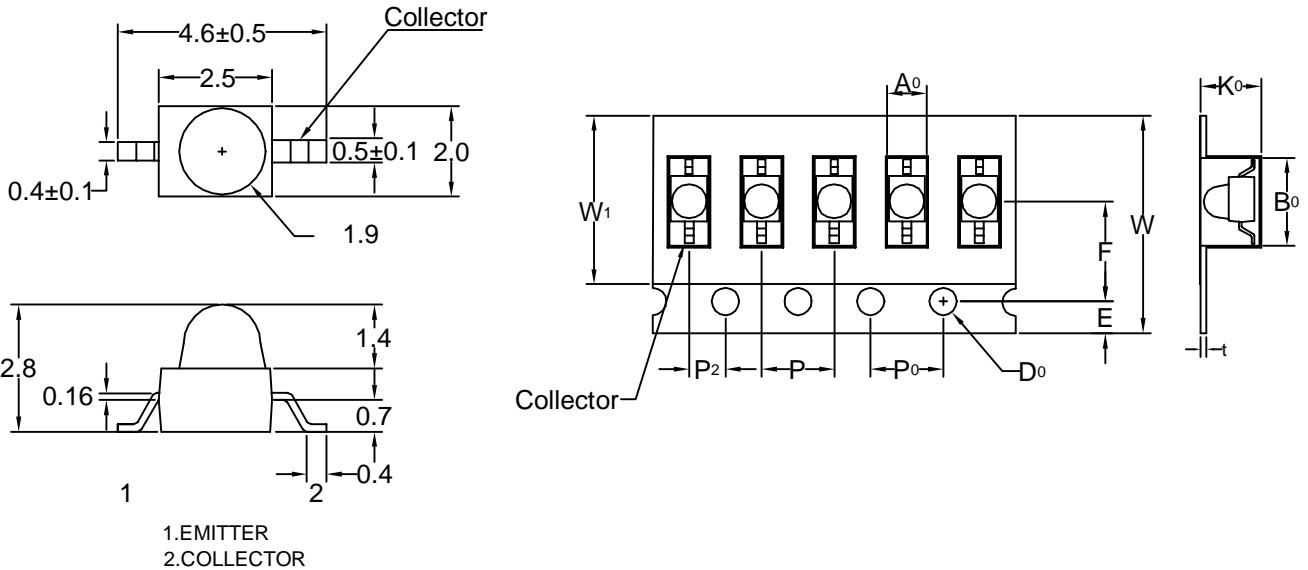




Package Dimension



Note:1.All dimension are in millimeter tolerance is $\pm 0.25\text{mm}$ unless otherwise noted
2.Specifications are subject to change without notice

MAXIMUM RATINGS($T_a=25$)

PARAMETER	MAXIMUM RATINGS	UNIT
Power Dissipation	100	mw
Collector-Emitter Voltage	30	V
Emitter-Collector Voltage	5	V
Operating Temperature	-50 TO +100	
Storage Temperature	-50 TO +100	
Lead Soldering Temperature(1.6mm From Body)	260 for 5 seconds	

ELECTRICAL CHARACTERISTICS($T_a=25$)

PARAMETER	SYMBOL	Min.	Typ.	Max.	UNIT	TEST CONDITION
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	30			V	$I_c=1\text{mA}$ $E_e=0\text{mw/cm}^2$
Emitter-Collector Breakdown Voltage	$V_{(BR)ECO}$	5			V	$I_E=100\ \mu\text{A}$ $E_e=0\text{mw/cm}^2$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.4	V	$I_c=0.5\text{mA}$ $E_e=20\text{mw/cm}^2$
Rise Time	T_r		5		μs	$V_{CE}=30\text{V}$ $I_C=800\ \mu\text{A}, R_L=1\text{K}$
Fall Time	T_f		5		μs	
Collector Dark Current	I_{CEO}			100	nA	$V_{CE}=10\text{V}$ $E_e=0\text{mw/cm}^2$
On State Collector Current	$I_p(\text{on})$	1		2	mA	$V_{CE}=5\text{v}$ $E_e=1\text{mw/cm}^2$ $P=940\text{nm}$
		2		4	mA	
		4		8	mA	
		8			mA	



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NPN SILICON PHOTOTRANSISTOR LED LAMPS

LPT9033/TR1

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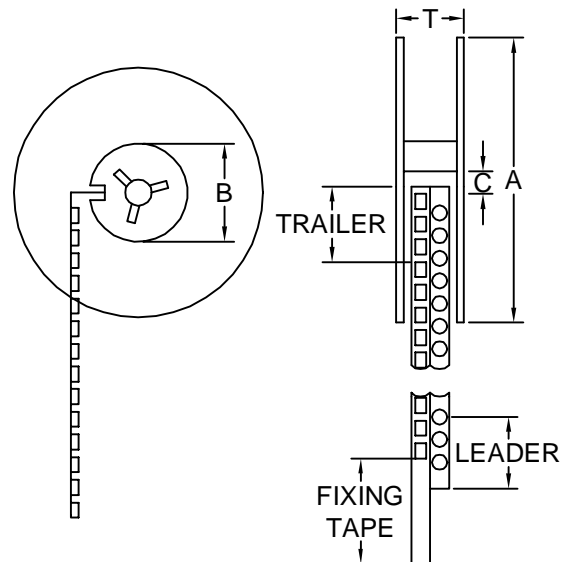
Dimensions Symbol Information

Compartment	Symbol	Dimension	Tol.	Centers Line	Symbol	Dimension	Tol.
Length	Ao	2.16	±0.2	Length Direction	P ₂	2.0	±0.2
Width	Bo	4.85	±0.2	Width Direction	F	5.5	±0.2
Depth	Ko	3.32	±0.2	Sprocket Hole			
Pitch	P	4.0	±0.2	Diameter	Do	1.5	±0.2
				Pitch	Po	4.0	±0.2
				Distance	E	1.75	±0.2
Carrier Tape							
Width	W	12	±0.3				
Thickness	t	0.3	±0.2	Fixing Tape			
				Width	W1	9.3	±0.2
				Thickness		0.1	max

Configuration Of Reel And Flange

Note:dimension in mm

Flange	Symbol	Dimension	Tol.
Diameter	A	178	+0 -2
Space Between Flanges	T	16	±1
Key Slit			
	Symbol	Dimension	Tol.
Width Hub Diameter	B	20	±1.5
Hub			
	Symbol	Dimension	Tol.
Spindle Hole	C	12.5	±1



Ordering Information

Part No.	Description	Quantity/Reel
LPT9033/TR1	12mm tape,7" reel	1500 devices

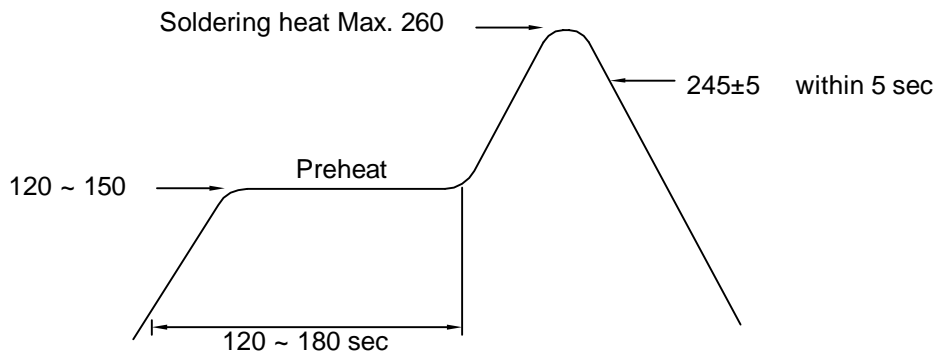


Recommended Soldering Conditions

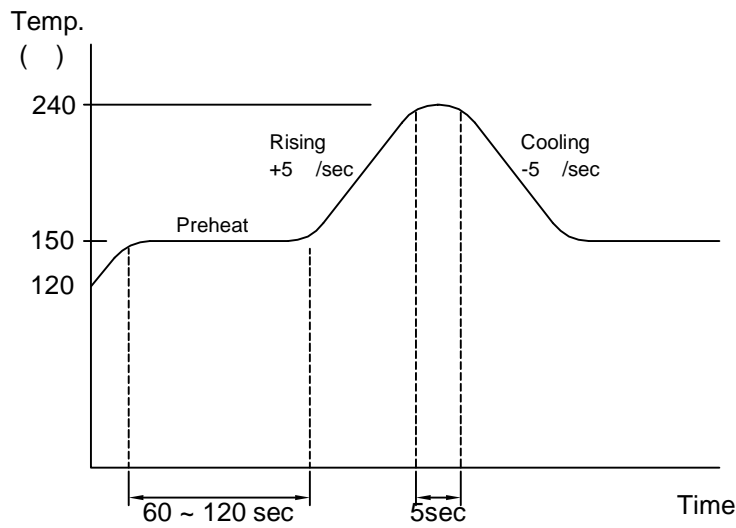
1. Hand Solder

Basic spec is 280 3 sec one time only.

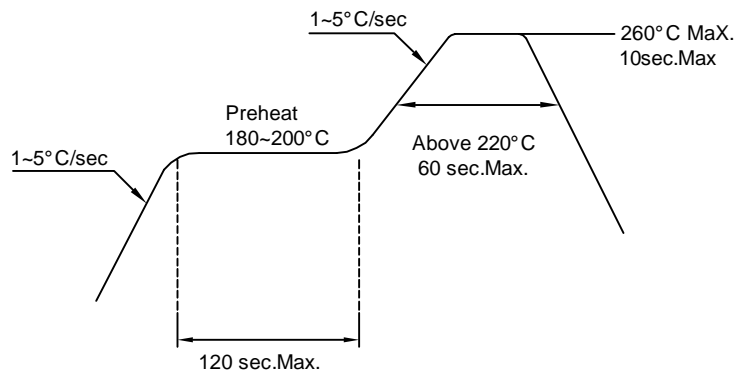
2. Wave Solder



3-1. LEAD Reflow Solder



3-2 PB-Free Reflow Solder



Reflow Soldering should not be done more than two times.