

PRODUCT SPECIFICATION

Model No. : CSDS-S39126V-11

Description:	
■ Product Type	: Single Digit SMD Display
■ Digit Height	: 0.39 Inch
■ Emitting Color	: Orange
■ Feature	: Gray Face Common Anode White Segment



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY
	<div style="text-align: center;"> <p>2024. 05. 31.</p> <p>Lynn</p> <p>All rights reserved</p> </div>	<div style="text-align: center;"> <p>2024. 05. 31.</p> <p>Yuan</p> <p>All rights reserved</p> </div>	<div style="text-align: center;"> <p>2024. 05. 31.</p> <p>L X</p> <p>All rights reserved</p> </div>

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Model No.: CSDS-S39126V-11

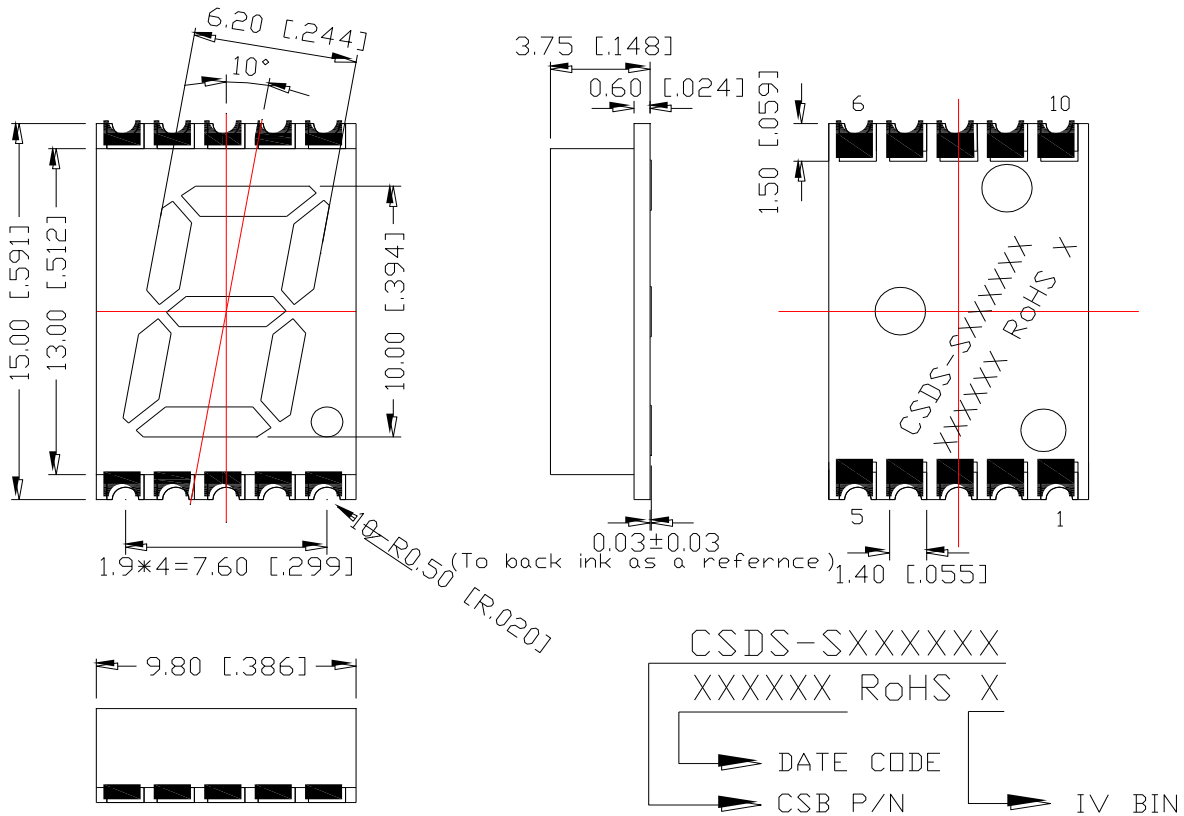
■ **Features -**

1. 0.39 inch (10.00mm) digit height.
2. Qualified according to JEDEC moisture sensitivity Level 2a
3. RoHS compliant.
4. Low power consumption.
5. Easy mounting on P.C. board

■ **Device Selection Guide -**

Model No.	Chip Material	Color		Description
		Emitter	Segment Resin	
CSDS-S39126V-11	AlGaInP	Orange	White	Common Anode

■ **Mechanical Dimensions -**

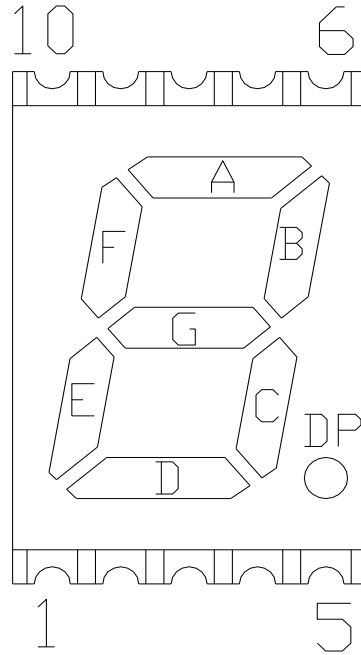


Notes:

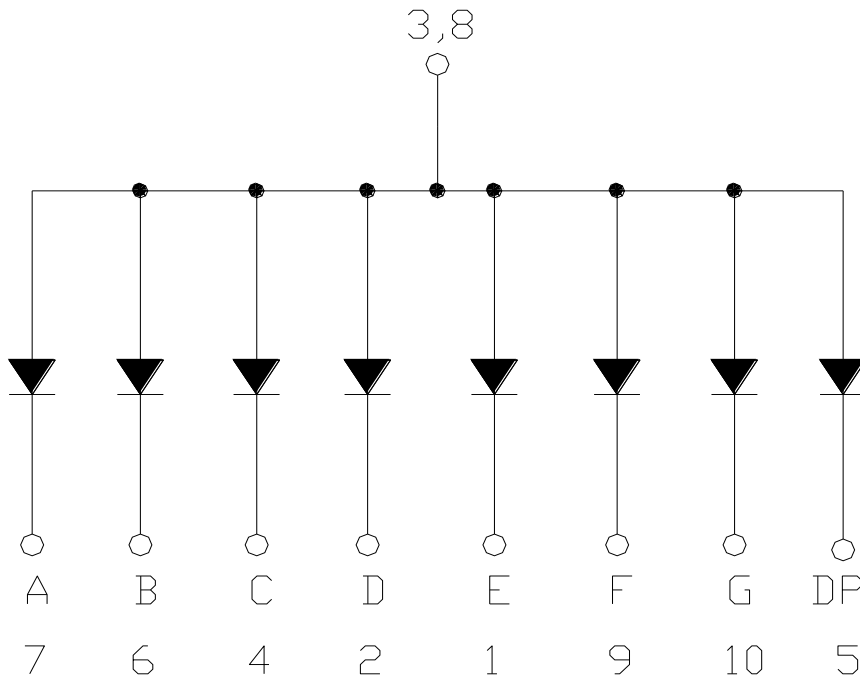
1. Dimension in millimeter [inch], tolerance is ±0.25 [.010], unless otherwise noted
2. Bending ≤ Length * 1%

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■ All Light On Segments Feature & Pad Position



■ Internal Circuit Diagrams -



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■ Absolute Maximum Rating -

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	P_d	70	mW
Continuous Forward Current Per Dice	I_f	25	mA
Peak Current Per Dice(duty cycle 1/10,1KHz)	I_{fp}	90	mA
Derating Liner from 25°C Per Dice	$\Delta I_f / \Delta T$	0.33	mA / °C
Reverse Voltage Per Dice	V_r	5	V
Operating Temp.	T_{opr}	-40~ +105	°C
Storage Temp.	T_{stg}	-40 ~ +105	°C
Hand Soldering Temp.	T_{sol}	350	°C

■ Electro-optical Characteristics -

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Segment	V_f	-	2	2.8	V	$I_f=20mA$
Luminous Intensity Per Segment	I_v	4.2	8	-	mcd	$I_f=10mA$
Peak Emission Wavelength	λ_p	-	632	-	nm	$I_f=20mA$
Dominant Wavelength	λ_d	-	625	-	nm	$I_f=20mA$
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	$I_f=20mA$
Reverse Current	I_r	-	-	100	μA	$V_r=5V$
Luminous Intensity Matching Ratio	I_v-m	-	-	2:1	-	$I_f=10mA$

■ Luminous General Iv Bin Grade ($I_f = 10mA$)

A	B	C	D	E	F	G	H	J	K	L	M
0.155	0.249	0.399	0.640	1.025	1.641	2.627	4.204	6.727	10.764	17.224	27.559
}		}		}		}		}		}	
0.248	0.398	0.639	1.024	1.640	2.626	4.203	6.726	10.763	17.223	27.558	44.095
}		}		}		}		}		}	
N	P	Q	R	S	T	U	V	W	X	Y	1
44.096	70.555	112.889	180.622	288.997	462.397	739.836	1183.738	1893.982	3030.372	4848.597	7757.756
}		}		}		}		}		}	
70.554	112.888	180.622	288.996	462.396	739.835	1183.737	1893.981	3030.371	4848.596	7757.755	12412.409
}		}		}		}		}		}	
2	3	4	5	6	7	8	9				
4034.034	19859.858	31775.773	50841.238	81345.982	130153.573	208245.718	333193.149				
}		}		}		}					
19859.857	31775.772	50841.237	81345.981	130153.572	208245.717	333193.148	533109.039				

*Remark : Unit=mcd

*Tolerance: ±20%

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Electrical / Optical Characteristics Curves -Per Dice
(Ta = 25°C Unless Otherwise Noted)

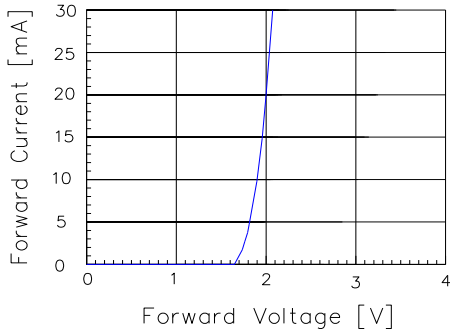


Fig 1. Forward Current vs. Forward Voltage

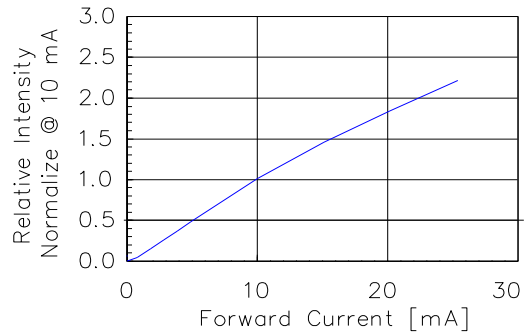


Fig 2. Relative Intensity vs. Forward Current

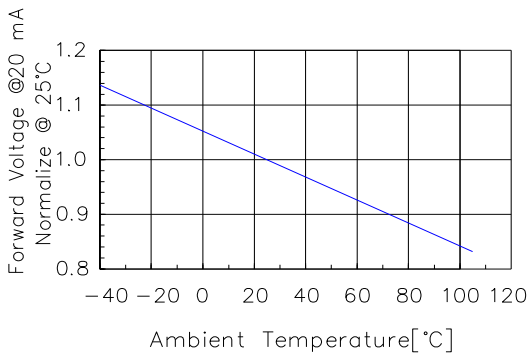


Fig 3. Forward Voltage vs. Temperature

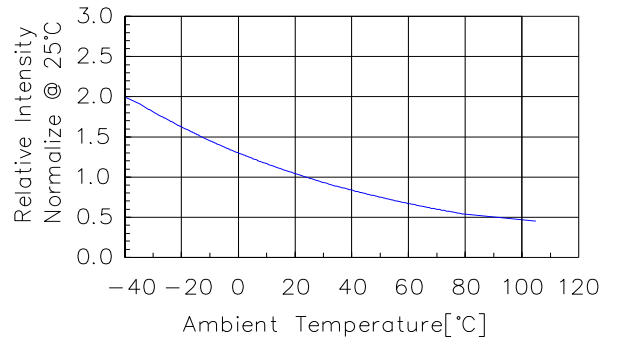


Fig 4. Relative Intensity vs. Temperature

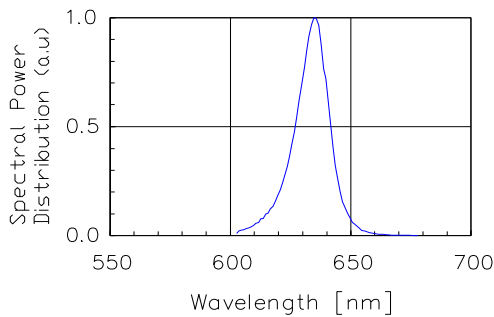


Fig 5. Spectral Power Distribution vs. Wavelength

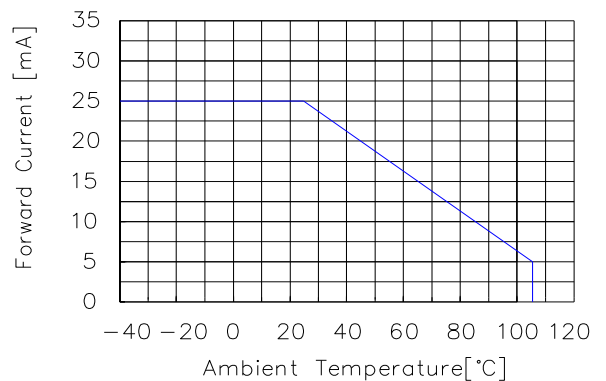


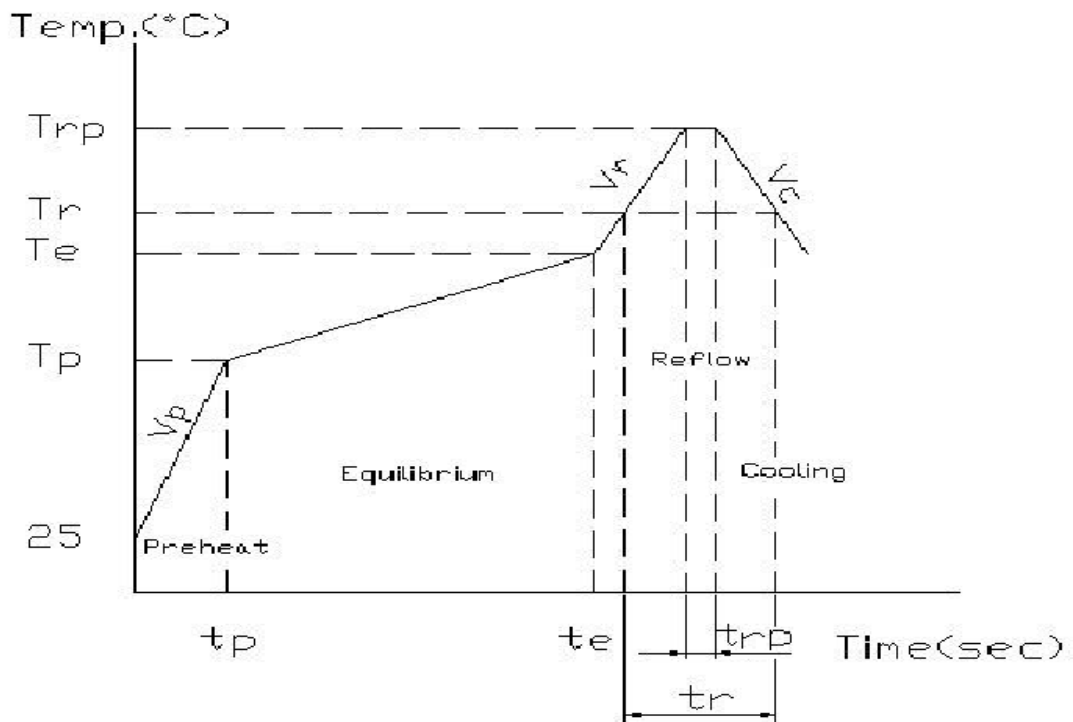
Fig 6. Forward current vs. Temperature

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Soldering Characteristics

1. IR-Reflow Soldering Profile :

Area	Title	Symbol	Min	Max	Unit
(1)Preheat	Ramp-up rate	Vp	1	5	°C/sec
	temperature	Tp	150	—	°C
	time	tp	—	—	sec
(2)Equilibrium	Ramp-up rate	Ve	—	—	°C/sec
	temperature	Te	150	200	°C
	Time	te	60	120	sec
(3)Reflow	Ramp-up rate	Vr	1	5	°C/sec
	temperature	Tr	220	—	°C
	Time	tr	—	60	sec
	Peak temperature	Trp	—	260	°C
	Peak time	trp	—	10	sec
(4)Cooling	Ramp-down rate	Vc	3	6	°C/sec



2.Hand Soldering (Iron Condition)

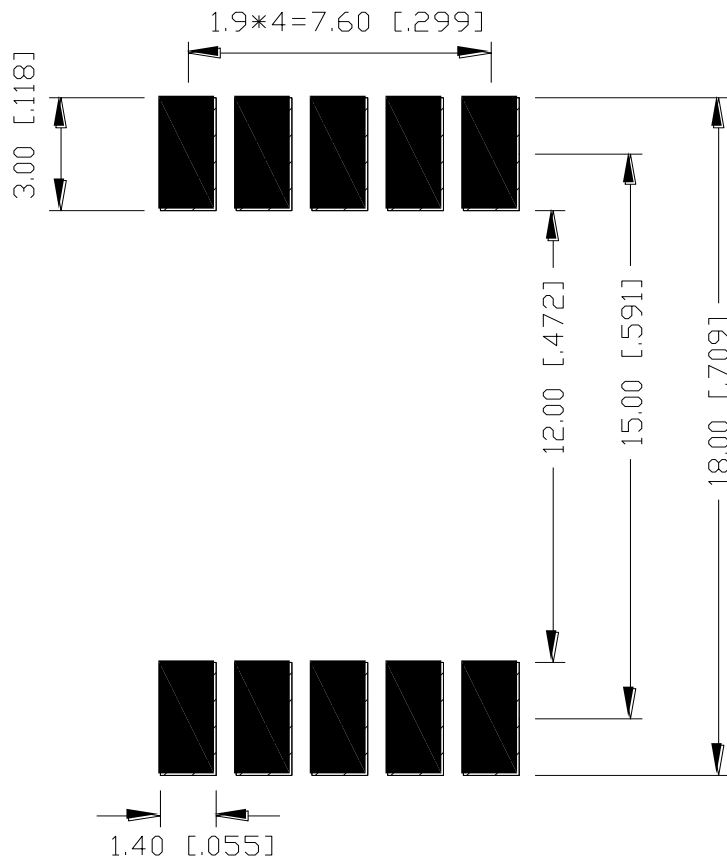
Soldering Iron:30W Max

Temperature 350°C Max

Soldering Time:3 Seconds Max(One Time)

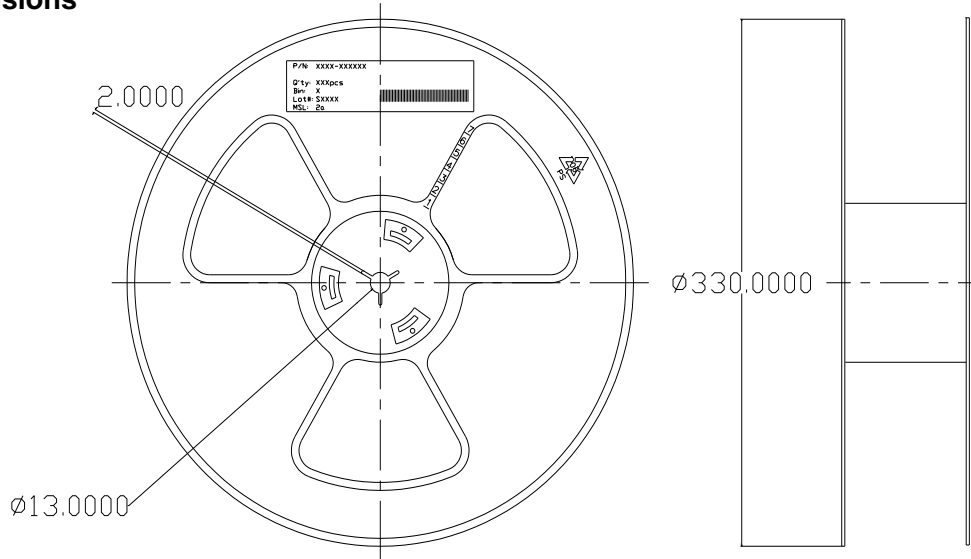
Distance:1.6mm min(From seating plane)

■ Soldering Pad Size

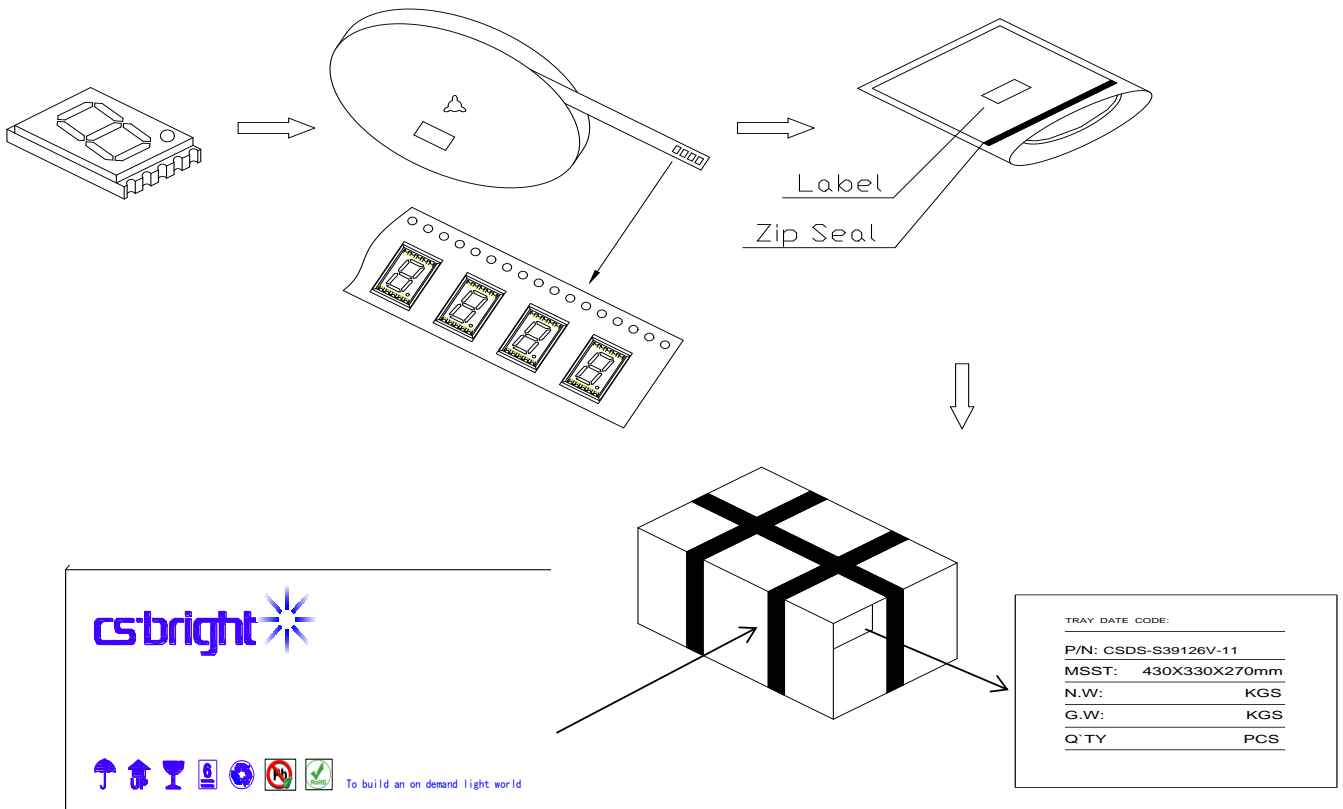


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■ Reel Dimensions



■ Packing & Label Specifications



Package Name	Size	Unit	Amount	Unit	Amount	Unit	Note
Reel	Φ 330	mm	1	Reel	1000	Pcs	/
Bag	L450*W430	mm	1	Reel	1000	Pcs	/
Outer Box	L440*W340*H270	mm	7	Bag	7000	Pcs	/

Spec. No.	PS-DS-S39126V-11
Rev.	D

Model No.: CSDS-S39126V-11

■ Storage Method

- Storage Conditions

Before opening the package:

The LEDs should be kept at 30°C or less and 90%RH or less. The LEDs should be used within a year.

When storing the LEDs, moisture proof packaging with absorbent material (silica gel) is recommended.

After opening the package:

The LEDs should be kept at 30°C or less and 70%RH or less. The LEDs should be soldered within 168 hours (7days) after opening the package. If unused LEDs remain, they should be stored in moisture proof packages, such as sealed containers with packages of moisture absorbent material (silica gel). It is also recommended to return the LEDs to the original moisture proof bag and to reseal the moisture proof bag again.

- If the moisture absorbent material (silica gel) has faded away or the LEDs have exceeded the storage time, baking treatment should be performed using the following conditions.

Baking treatment: more than 24 hours at 65 ± 5°C

■ Change story

REV.	DATE	CHANGE DESCRIPTION
A	2014/7/2	Original Version
B	2015/1/13	Change the positioning colum to 3
C	2019/8/12	Arrier tapes with double row to single row
D	2024/5/31	Change the package quantity from 5K to 7K