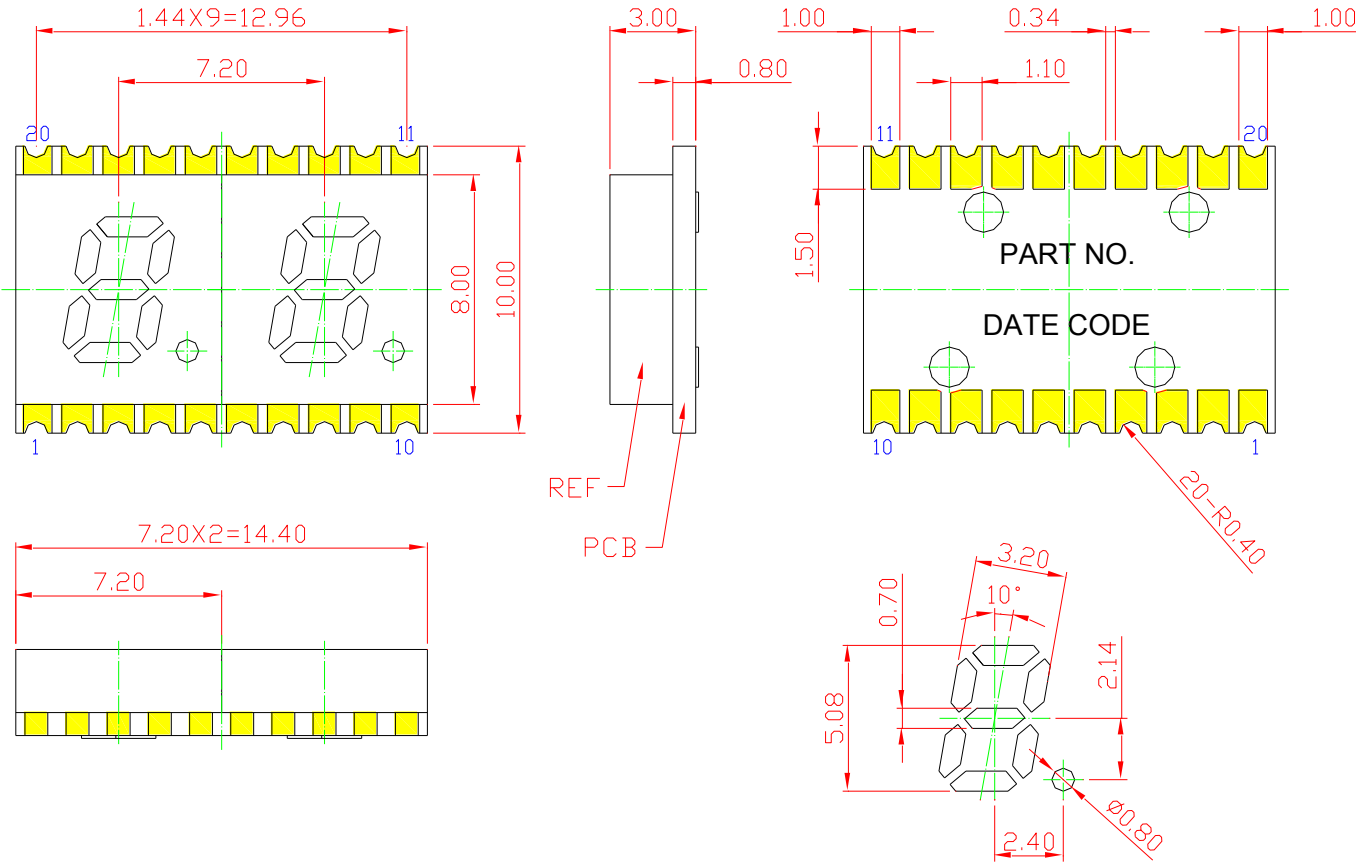


## SPECIFICATIONS SDDA20G2W

### OUTLINES DIMENSIONS



The technical drawings show the following dimensions:

- Top View:** Total width is 12.96 mm (1.44 x 9). The distance between the centers of the two LED chips is 7.20 mm. The chip width is 2.00 mm. The package height is 10.00 mm, with a chip height of 8.00 mm.
- Side View:** The package thickness is 3.00 mm. The distance from the chip center to the top edge is 0.80 mm. The distance from the chip center to the bottom edge is 1.50 mm.
- Bottom View:** The distance between the centers of the two LED chips is 14.40 mm (7.20 x 2). The chip width is 7.20 mm.
- Detail View:** The LED chip is 3.20 mm wide with a 10° beam angle. The chip height is 2.14 mm. The distance from the chip center to the bottom edge is 2.40 mm. The distance from the chip center to the top edge is 0.70 mm. The chip diameter is 0.80 mm. The package is labeled with 'PART NO.' and 'DATE CODE'.

Labels 'REF' and 'PCB' indicate the reference and PCB mounting points. A note '20-R0.40' is also present near the bottom edge.

**Notes:**

- All Dimensions are in millimeters (inches).
- Tolerance is  $\pm 0.25\text{mm}$  (0.01") unless otherwise noted.
- Specifications are subject to change without notice.

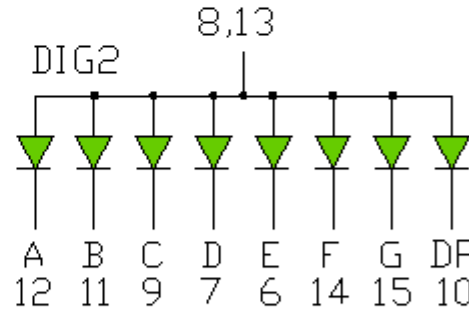
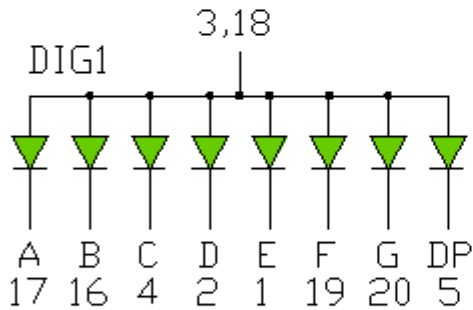
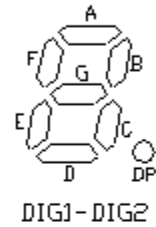
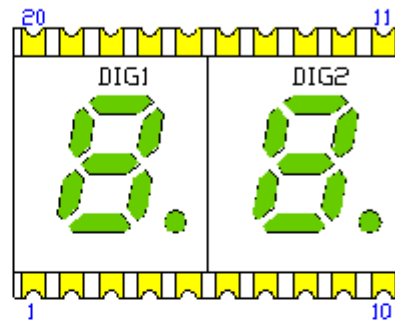
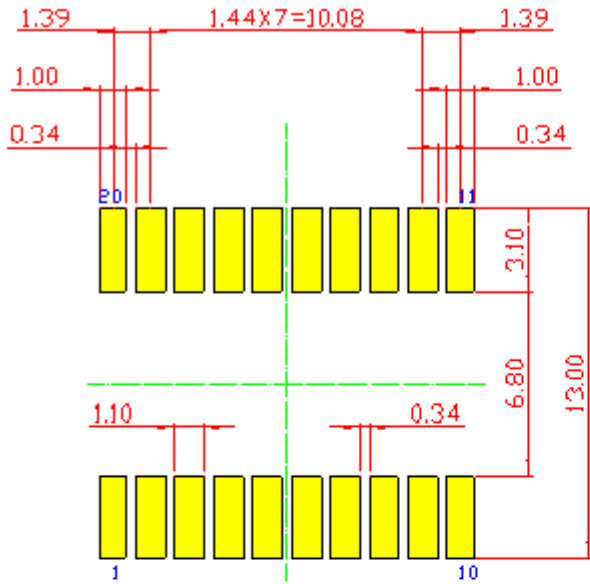
Part Number	Chip Material	Color of Emission	Lens Type	Description
SDDA20G2W	InGaAlP	Green	White Segment	Common Anode



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## TYPICAL INTERNAL EQUIVALENT CIRCUIT

Recommended Soldering Pattern



(Common Anode)



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**ABSOLUTE MAXIMUM RATINGS (TA=25°C)**

Parameter	Symbol	Max Rating	Unit
Power Dissipation	PD	70	mW
Pulse Forward Current	IFP	90	mA
Continuous Forward Current	IF	25	mA
Reverse Voltage Segment	VR	5	V
Operating Temperature Range	TOPR	-40~+105	°C
Storage Temperature Range	TSTG	-40~+105	°C
IFP = Pulse Width ≤ 10 ms, Duty Ratio ≤1/10. Soldering Condition: 260 °C/ 5sec			

**OPTICAL-ELECTRICAL CHARACTERISTICS (TA=25°C)**

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	IV	IF = 20mA	-	6	-	mcd
Forward Voltage	VF	IF = 20mA	-	2.1	2.6	V
Reverse Leakage Current	IR	VR = 5V	-	-	10	µA
Dominant Wavelength	λd	IF = 20mA	-	570	-	nm
Peak Wavelength	Δp	IF = 20mA	-	573	-	nm



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## OPTICAL CHARACTERISTIC CURVES

(25 °C Free Air Temperature Unless Otherwise Specified)

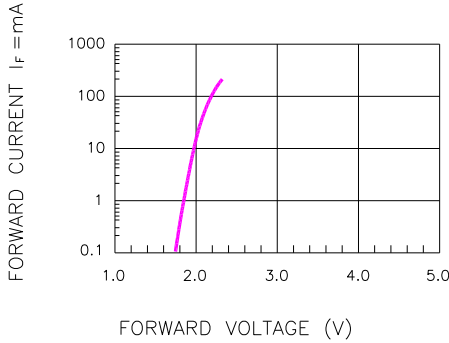


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

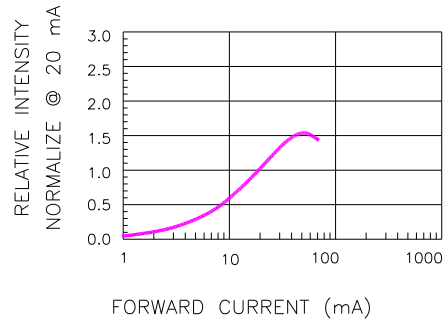


Fig.2 RELATIVE INTENSITY VS. FORWARD CURRENT

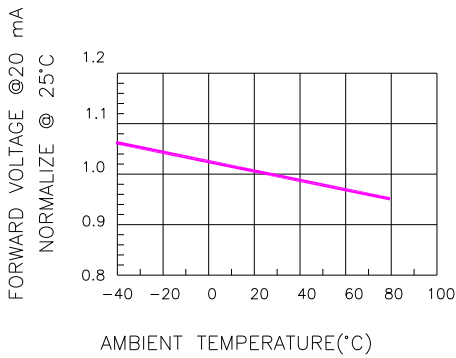


Fig.3 FORWARD VOLTAGE VS. TEMPERATURE

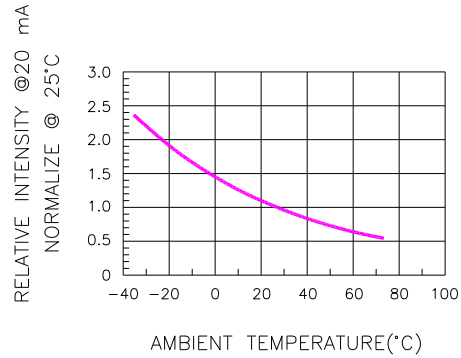


Fig.4 RELATIVE INTENSITY VS. TEMPERATURE

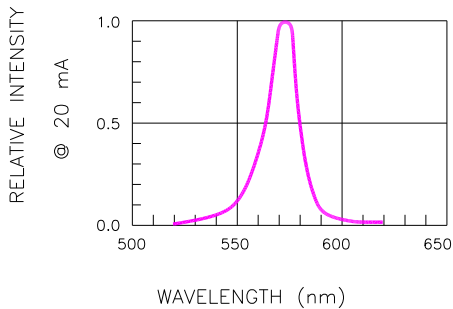


Fig.5 RELATIVE INTENSITY VS. WAVELENGTH

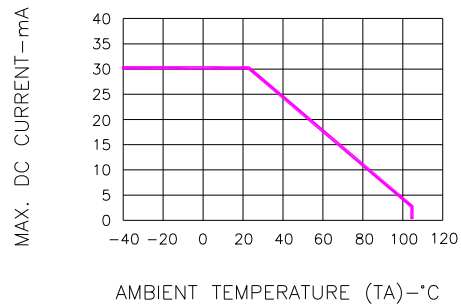


Fig.6 MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE

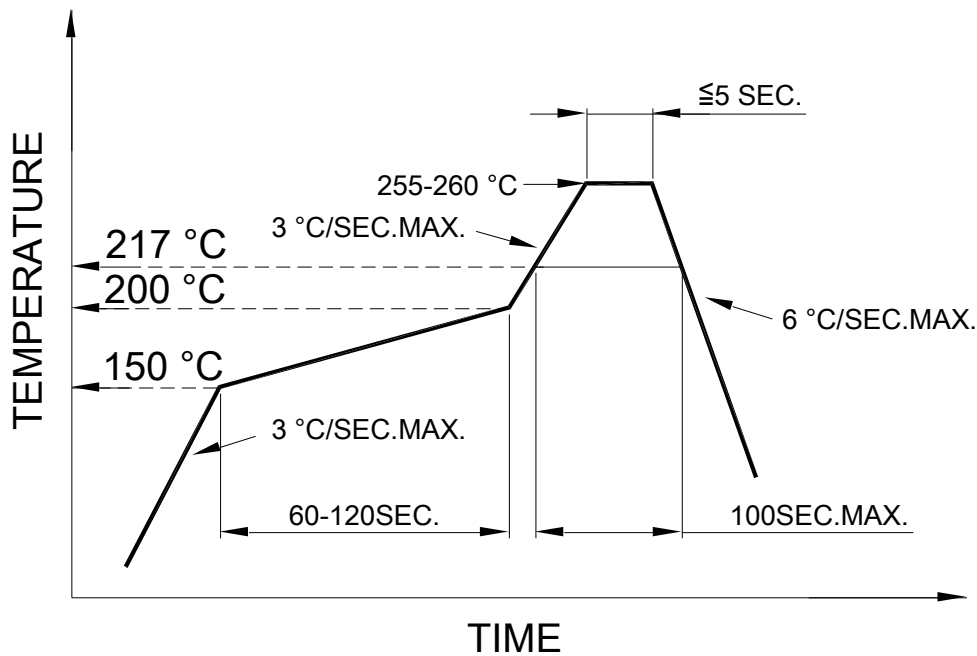


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**SOLDERING CONDITIONS – DISPLAY TYPE LED**
**● RECOMMEND SOLDERING PROFILE**

SMT Soldering Profile

Pb free reflow soldering Profile


**● SOLDERING IRON**

Basic specification :  $\leq 4$  seconds when 260°C, If temperature is higher, time should be shorter (+10°C→1 sec). Power dissipation of iron should be smaller than 15W, and temperature should be controllable. Surface temperature of the device should be under 230°C.

**● REWORK**

Customer must finish rework within  $\leq 3$  sec under 350°C.



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