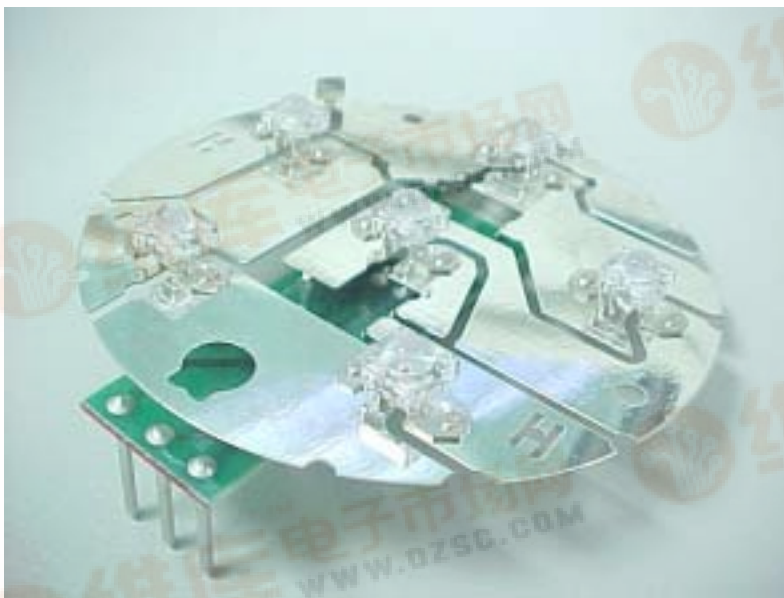


HPWG-N510

SnapLED Six LED Multi-Function Signal

Technical Data DS10

Using Lumileds' patented solderless clinch technology and SnapLED emitters, this six-LED round assembly is an integrated LED signal solution complete with control circuitry. By using two input terminals, the signal may switch between two brightness modes. The product features a compact and rugged design and provides a cost effective source for vehicle Turn-Tail-Stop lamps.



Benefits

- Integrated LED Solution for Turn/Tail/Stop Applications
- Life of Vehicle Light Source
- Standard Design for Multiple Vehicle Applications
- Rugged and Compact

Features

- Drive Circuitry and Connector Pins Included
- Compact, Low Profile Package
- Light Source Sufficient for SAE/ECE/JIS Stop/Tail Requirements

LUMILEDS™
LIGHT FROM SILICON VALLEY

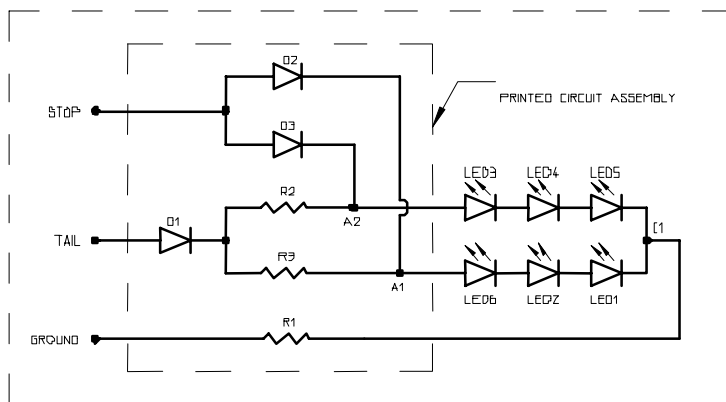
Optical & Electrical Characteristics

PART NUMBER	LED COLOR	VOLTAGE (V)	MODE	TOTAL FLUX ^(1,2,3) Φ_v (lm)		POWER CONSUMPTION (W)	
				MIN.	MAX.	MIN.	MAX.
HPWG-N510	RED-ORANGE	12.8	STOP	39.5	81.3	2.8	3.5
			TAIL	3.7	7.8	0.19	0.23
		13.5	STOP	41.8	86.1	3.3	4.1
			TAIL	4.1	8.6	0.22	0.25

Color Characteristics

PART NUMBER	DOMINANT WAVELENGTH ^(1,2) λ_d (nm)	
	MIN.	MAX.
HPWG-N510	611	634

Circuit Schematic



Notes:

- ϕ_v is the total steady state flux of the assembly after thermal stabilization.
- The thermal resistance assumed is $R_{th-junction-ambient}=12.9^{\circ}C/W$, which represents the thermal resistance of the LED assembly when the substrate is potted in epoxy resin. To determine junction temperature, multiply R_{th} by power consumption and add to ambient temperature.
- No LED emits more than 2 times the flux of any other LED within the same assembly.

Notes:

- The dominant wavelength is derived from the CIE Chromaticity Diagram and represents the perceived color of the signal.
- The dominant wavelength does not vary between emitters by more than 8nm within the same assembly.

Absolute Maximum Ratings

PARAMETER	HPWG-N510	UNITS
DC INPUT OPERATING VOLTAGE ^[1]	16	V
POWER DISSIPATION (STOP)	3.5 (@ 12.8V)	W
POWER DISSIPATION (STOP)	4.1 (@ 13.5V)	W
REVERSE VOLTAGE (STOP & TAIL)	500 (@ I _R = 200 μA)	V
OPERATING TEMPERATURE RANGE ^[2]	-40 to +85 (@ 12.8V)	°C
OPERATING TEMPERATURE RANGE ^[2]	-40 to +85 (@ 13.5V)	°C
OPERATING TEMPERATURE RANGE ^[2]	-40 to +25 (@ 15.5V)	°C
STORAGE TEMPERATURE RANGE	-55 to +100	°C
LED JUNCTION TEMPERATURE	125	°C

Notes:

- 16V operation is allowed at T_{ambient} = 25°C only.
- Temperature range for sustained operation based on R_{th-junction-ambient} = 12.9°C/W.

Company Information

Lumileds is a world-class supplier of Light Emitting Diodes (LEDs) producing billions of LEDs annually. Lumileds is a fully integrated supplier, producing core LED material in all three base colors (Red, Green, Blue) and White. Lumileds has R&D development centers in San Jose, California and Best, The Netherlands. Production capabilities in San Jose, California and Malaysia.

Lumileds is pioneering the high-flux LED technology and bridging the gap between solid-state LED technology and the lighting world. Lumileds is absolutely dedicated to bringing the best and brightest LED technology to enable new applications and markets in the Lighting world.



Lumileds may make process or materials changes affecting the performance or other characteristics of our products. These products supplied after such changes will continue to meet published specifications, but may not be identical to products supplied as samples or under prior orders.

LUMILEDS

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