LED DRIVERS / MODULES

LED PCB Assembly - Tail Lamp

Tail lamps assemblies are being used in two Wheeler and 4 Wheeler for vehicle position identification and warning for rear side riders for brake application information. Tail function works as rear position lamp in night driving condition and Stop function will be ON when brake is applied. In stop Function, the Intensity of the Lamp will increase to indicate change in driving condition.

Specifications:

- System Voltage
- Input Voltage Range
- Operating Current Tail Lamp : 5mA
- Operating current Stop Lamp : 50mA
 - Input Power @ VIN 13.5V : 0.7W Max.
 - LED: 4 LED / Amber : 4 LED / Amber : Linear / Constant Current
- Control Topology



- **Reverse Polarity**
- ESD Protection
- EMI EMC compatibility
- Overvoltage protection

Environment / Durability:

Reliability Test standard

EMI/EMC/ESD

- : Reliability Test standard : ISO16750/ISO7637/SAEJ1113

: 12V

: 9~16V

- Operating Temperature range
- : EMI/EMC/ESD : AIS 004 /±15KV
- : Operating Temperature range: -30°C to 80°C

LED PCB Assembly - Day Running Light (DRL) / Position Lamp

LED DRL / Position lamp assemblies are being used in two Wheeler and Four wheeled vehicles like Motorcycles, Cars and Commercial vehicles for vehicle position identification in day condition. LED DRL will be continuously ON during day operating condition of vehicle. In Position mode, the DRL will operate with low intensity in Night Condition along with Head Lamp which will improve the vehicle visibility and add to the beauty of vehicle. This will also be helpful to Rider if head lamp not operational in night condition or if vehicle br ake down.

Specifications: System Voltage : 12V/24V Input Voltage Range : 9~32V **Operating Current** : 560mA Input Power : 18W Max. LED : 14LED / White Efficiency : 95% Control Topology : Constant current LED Driver **Protections: Reverse Polarity** Overvoltage Overcurrent **ESD** Protection EMI EMC compatibility **Environment / Durability:** Reliability Test standard Reliability Test standard : ISO16750 EMI EMC / ESD: AIS 004 / ±15KV EMI EMC / ESD **Operating Temperature range** : Operating Temperature range: -30°C to 80°C Napino...an answer to High Quality Auto Electrical and Electronic Products

LED PCB - Rear Combination Lamp (Tail / Stop / Reverse / Direction / License Lamp)

: 9W Max. (Full Lamp ON)

: 12V

: 9~16V

LIC 40

LED Rear combination lamps provide the functionality of Tail lamp, Stop lamp, Reverse parking lamp, Direction Indicator and Number plate illumination. RCL is being used in two wheelers, Passenger Vehicles, E-vehicle and commercial vehicles with different combination of functionality. This LED RCL is designed for 12V system with wide input voltage range of 9~16V.

: TL 20mA, Stop 145, Rev/DI 220,

Specifications:

- System Voltage
- Input Voltage Range
- Input Power @ VIN-13.5V
- Operating Current(mA)
- No. of LEDs
- **Control Topology**

Protections:

Reverse Polarity

- Overvoltage
- Overcurrent
- **ESD** Protection
- EMI EMCcompatibility
- **Environment / Durability:**
- Operating Temperature range
- Reliability Test standard
- EMI/EMC/ESD

- : Operating Temperature range: -30°C to 80°C
- : Reliability Test standard : ISO16750 / SAE J 1113
- : EMI/EMC/ESD : ISO11452 / ±15KV

Led PCB Assembly - Head Lamp Driver

Head Lamp control module is independent Driver Unit design to Driver LED head Lamp (HB/LB), LED Day Running Light and Direction indicator Lamp. This is very compact and designed to meet all testing requirement including EMI/EMC. This is designed for Passenger and commercial vehicles head lamp.

: High Beam, Low Beam, DRL, DI

Specifications:

- System Voltage
- Input Voltage Range
- Outputs
- **O/P** Current:

: 9~16V

: 12V

- O/P voltage (max.) for each O/P : (VIN -1)Volt : Constant Current
- **Control Topology**

Protections:

- **Reverse Polarity**
- **O/P** short circuit
- Overvoltage
- ESD Protection
- EMI EMC compatibility

Environment / Durability:

- Reliability Test standard
- EMI/EMC/ESD
- Operating Temperature range
- : Reliability Test standard : ISO16750
- : EMI/EMC/ESD : AIS 004 / ±10KV

Napino...an answer to High Quality Auto Electrical and Electronic Products

: Operating Temperature range : -30°C to 80°C





01