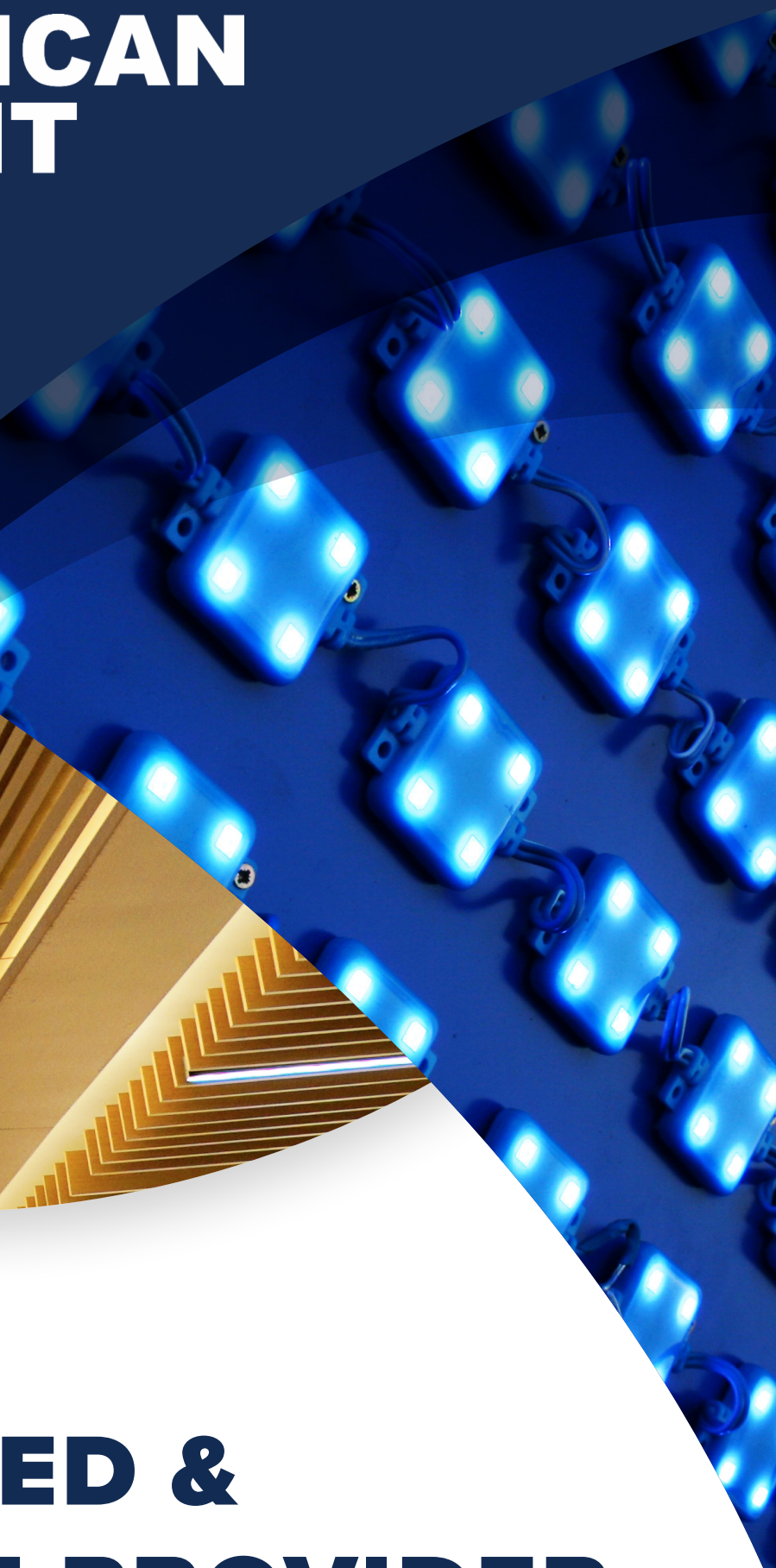
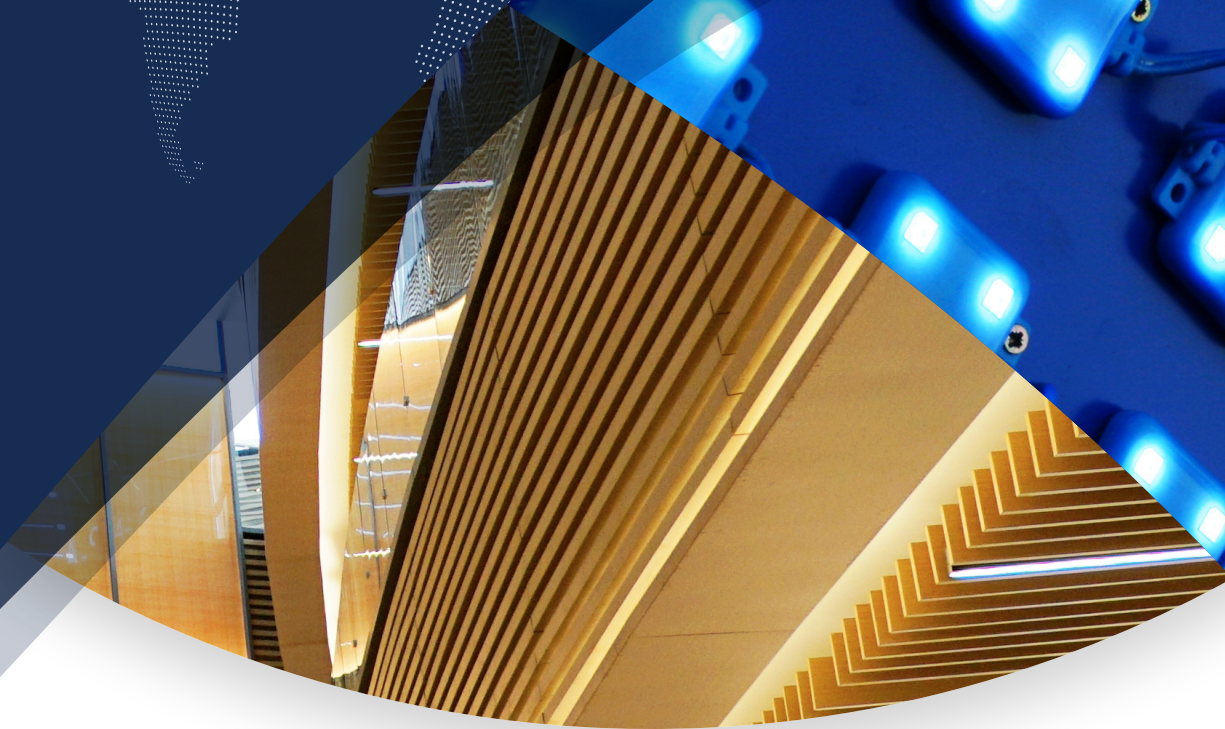




AMERICAN BRIGHT



**PREMIER
GLOBAL LED &
SOLUTION PROVIDER**

ILLUMINATING EXCELLENCE ACROSS INDUSTRIES

BRIGHT IDEAS. BRILLIANT SOLUTIONS.

Discover American Bright's extensive product range and innovative solutions, lighting the way for over 28 years across a variety of industries.

At American Bright, we enlighten the path for engineering teams to implement advanced products with our expertise to support all applications and markets, including general lighting, aerospace, aircraft interior lighting, automotive, robotics, gaming, medical, entertainment, food & beverage, industrial and home automation, horticulture, and architectural which includes indoor and outdoor commercial and residential buildings.

This brochure outlines a comprehensive collection of products and revolutionary lighting designs that are reliable, energy-efficient, versatile, and compatible.



RED, GREEN, AND BLUE (RGB) WITH BUILT-IN INTEGRATED CIRCUIT (IC)

RGB LEDs produce an array of colors by modulating the strength of red, green, and blue diodes. The IC packages feature an integrated circuit with a self-detection signal that supports continuous oscillation and pulse width modulation (PWM) output to maintain a static screen.

- Available in PLCC-6 5050, 3528 and PLCC-4 5050, 3528, 4020 (side-emitting), and EMC 2020 packages

Features

- Synchronous of one-lane and two-lane
- 8-bit color set (256 colors)
- 5-bit brightness adjustment (32 level)
- Uses SPI (Serial Peripheral Interface) protocol
- Low voltage power consumption (0.1-0.5W for RGBW+IC, RGB+IC)
- Refresh Rate of 400 cycles
- Certified with **AEC-Q102** (PLCC-6 3528 package only)

PLASTIC LEADED CHIP CARRIER (PLCC) & CERAMIC & EMC BASED LED COMPONENTS

These LED components are available in PLCC-2, PLCC-4, PLCC-6, PLCC-8 packages: Ceramic and EMC (3030, 5050, 3535, 2835, 4757 and 3639, 7070) packages.

- Available in single color, bi-color, RGB, RGBW, and addressable RGB and RGBW with built-in IC
- Automotive Grade available (**AEC-Q101** EMC 3014 package)
- Lighting Grade White available with high luminous flux output and high current ratings

Features

- Wide viewing angles
- Low profile
- High efficacy
- Full spectrum RGB
- Extensive range of power consumption from 0.05W~ 3W
- Standard current rating from 2mA – 150mA
- Higher current ratings from 180mA – 1000mA
- LM80 for lighting applications
- ANSI binning for white

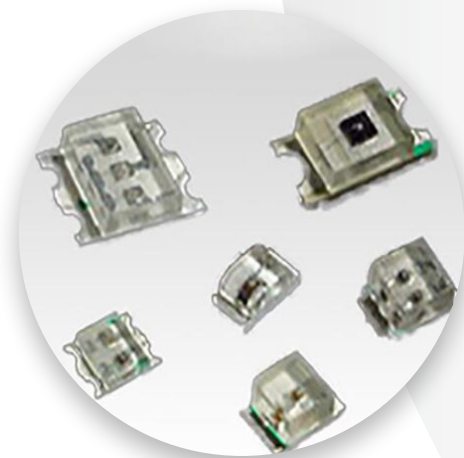
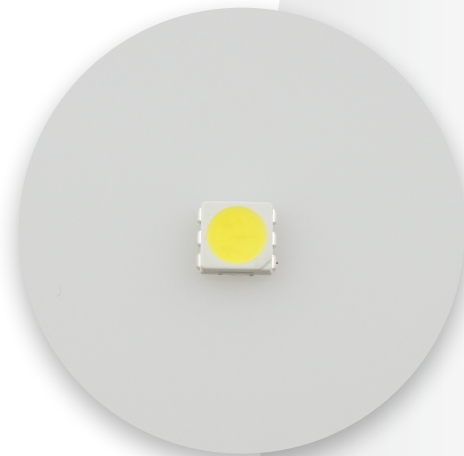
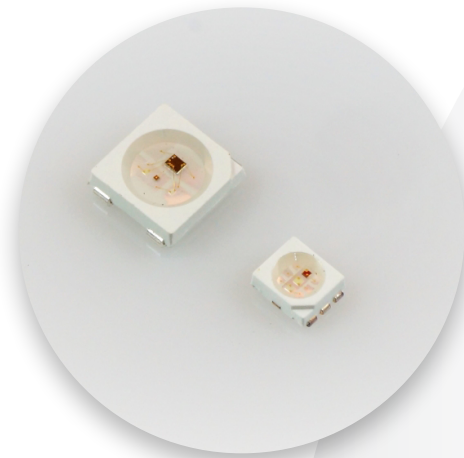
SURFACE-MOUNT TECHNOLOGY (SMT) COMPONENTS

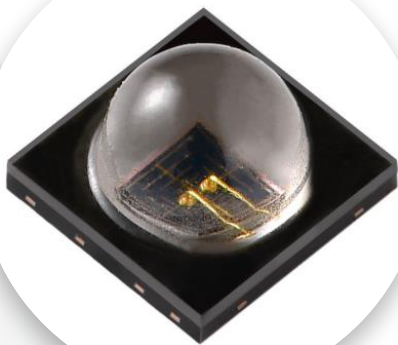
These LEDs are available in 0201, 0402, 0603, 0805, 1204, & 1210 and 1206 packages, and more.

- Available in single color, bi-color, and RGB
- Axial leaded, gull-winged, Z-bend and Yoke formed
- Top Emitting and Side-Emitting
- Low current option is available

Features

- Ensure precise illumination and effortless integration with SMT chip LED products
- Offer numerous advantages, including improved electrical performance, increased reliability, and enhanced thermal management
- ANSI binning for white





INFRARED LEDS

Our complete line of advanced through-hole and SMT infrared devices are suitable for both digital and analog control systems. This product offering includes all the components needed to emit, receive, and process infrared signals:

- High Power IR Emitters
- Photo Transistors
- Photo Diodes
- Receiver Modules
- Photo Couplers
- Photo Interrupters
- Ambient Light Sensors (ALS)

Features

- Discrete infrared
- Through-hole and SMT packages
- REACH and RoHS compliance
- Special pin lengths, pins, and sizes
- High radiant power and intensity
- High sensitivity and fast switching time
- Narrow and wide radiant angles (20°~130°)
- Optimized performance at 850nm or 940nm wavelengths

EZYLED™

This Patented LED series with a built-in driver integrated circuit streamlines installation without requiring external driver boards. Operates over a wide voltage input range while the luminous intensity and CCT remains.

- Available in red, blue, green, amber, and white

Features

- 3030 package
- Built-in constant voltage driver IC
- Broad range of input voltage: 12V version: 10.5 – 24V AC/DC
24V version: 22.5 – 36V AC/DC
- Power 0.5W, 1.0W, 2.4W
- Connected in parallel
- Over temperature protection
- Reduces the need for additional circuitry on the board

LED DISPLAYS

The most diverse selection of displays from standard to custom configurations with single digit displays and multi-digit display modules up to six digits in an array of heights.

Transform your data with vibrant visuals using bar graph displays and bar graph arrays.

- Available in single color, bi-color, and supports tri-color operation

Features

- Exceptional brightness in daylight
- Seven segment Display
- Alpha-Numeric Display
- SMT Display
- Dot matrix 5x7, 5x8, & 8x8
- Low power requirements
- Bar graph displays 5 – 15 segments
- Driving circuit supports direct, duplex, and multiplex
- drive modes with common anode and common cathode configurations

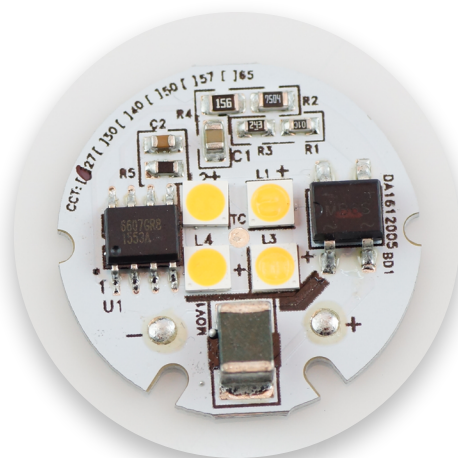


AC LED LIGHTING MODULES

These modules are advanced light sources that integrate LED chips and the AC driver into a single module. We provide a patented AC LED Module for general lighting of 12VAC, 120VAC, and 230VAC direct input—SimpleDrive®, Ingeni-AC™.

Features

- Simplified design
- Enhanced compatibility, durability, and reliability
- LED component with LM80 report
- Circular (S series): 1"-12"
- Square (S series): 3" (approx.)
- Linear (L series): 3", 6", 11" and 22" lengths



DC LED LIGHTING MODULES

These modules are advanced light sources that combine the LED chip with a DC circuit driver into a single module with a 12VDC/24VDC constant voltage input.

Features

- Wide color temperature ranges
- Aluminum-core PCB
- Customization capabilities with wires and connectors



AMERICAN BRIGHT LED DRIVERS

An LED driver serves as a critical device that controls and delivers the ideal current and voltage to an LED light. Unlike traditional bulbs, LEDs are both efficient and long-lasting. However, they exhibit distinct power demands. To function optimally, LEDs require a steady and accurate power supply, especially considering their sensitivity to temperature variations and aging effects. The LED driver bridges this gap by transforming high-voltage alternating current (AC) from the building into the low-voltage direct current (DC) that the LED necessitates for operation.

Features

- Input Voltage: 90 – 305VAC
- Output Power: 15W to 320W
- Output Voltage: 12VDC, 24VDC and 48VDC also available
- Body: Metal Body By Waterproof Grade up to IP67
- Open Circuit; Short Circuit; Over Load; Over Heat Protection
- Highest safety standard for North American and European markets - UL, cUL and CE certified
- Constant Voltage
- Dual mode Constant Voltage (CV) and Constant Current (CC) available





LIGHT STRIPS

Transform any indoor or outdoor space with customizable options for your applications in 5VDC, 12VDC and 24VDC.

Options

- Available in single color (White, Red, Amber, Blue, Green), RGB (Regular/Addressable) and RGBW (Regular/Addressable)
- Available in IP20, IP65, or IP68
- Available in customized lengths or standard reels: 2m (79") for 5VDC and 5m (197") for 12VDC/24VDC
- UL Listed



ROPE LIGHTS

Capture the brilliance with these IP68 versatile lights for any indoor or outdoor space with customizable options for your applications in 5VDC, 12VDC and 24VDC.

Options

- Available in single color (White, Red, Amber, Blue, Green), RGB (Regular/Addressable) and RGBW (Regular/Addressable)
- Top-emitting or side-emitting
- 5mm ultra-slim side-emitting
- Available in IP68
- Available in customized lengths or standard reels: 2m (79") for 5VDC and 5m (197") for 12VDC/24VDC
- UL Listed



CHIP-ON-BOARD (COB) FLEXIBLE LIGHTS

Effortlessly shape and brighten any space with COB lights with their sophisticated Chip-on-Board technology for unrivaled versatility and precision. Experience exceptional high lumen output (up to 1200 lm/m; 365 lm/ft) without any distracting hotspots.

Features

- Available in amber, green, red, blue, warm white, neutral white, cool white, RGB and Addressable RGB
- Dual color version—now available in warm white and cool white
- Dimmable
- Available in IP65, IP68 and IP20
- Available in customized lengths or standard reels: 2m (79") for 5VDC and 5m (197") for 12VDC/24VDC
- UL Listed

WHY AMERICAN BRIGHT SHINES

PARTNER WITH A GLOBAL EXPERT

Accessible Customer Support

We are a vertically integrated solutions provider with a team of illumination engineers that build efficient lighting designs. This means more control over the entire process, ensuring consistent quality, delivery, and cost-effective options. You can expect a quick turn-around time in responses with a broad range of comprehensive options suitable for your project.

Customization Expertise

Our team will bring your vision to life with custom high-tech lighting resources and offerings. Our global engineering knowledge enables a close partnership, aligning with appropriate products and custom designs that include components, modules, assemblies, and flexible lighting for your specific applications.

Pioneering LED Technology

We are leading the way in advanced products and features that are unique to the industry and for your distinct requirements. Stay ahead with our cutting-edge services to maintain your competitive edge.

Industry Applications

We deliver impactful LED solutions across a diverse range of industries and applications. Our custom applications include flexible lights for commercial building lighting, DC boards for commercial backlighting displays, light strips for the gaming industry, LEDs for interior automotive lighting and Infrared LEDs for touchless products, flexible horticultural rope lights, custom PCB modules for interior aircraft cabin lighting, and more. Our products have been tested and trusted for over 28 years, demonstrating our versatility and reliability.

Stringent Quality Procedures

We proudly adhere to quality procedures and are certified for many quality management systems (QMS), including **ISO 9001, ISO 14001, ISO/IATF 16949, and AS 9100.**

American Bright is ready to deliver custom solutions catered to your applications.



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