

New 638nm Red Laser Diode with the World's Highest Output Power of 500mW by Mitsubishi Electric

Mitsubishi Electric is introducing a new red laser diode, dubbed the ML520G72. It offers the world's highest output power compared to all laser diodes in the 638nm wavelength region and so it is perfectly suited to pico projector applications or other portable display systems requiring a red light source with high brightness. The ML520G72's output power of 500mW helps with the design of high-luminous LD-based projectors and can provide a luminous flux of up to 60 lumens (lm). At the moment LED-based projectors typically offer only about 10lm.

Furthermore, the new ML520G72 offers an industry leading conversion efficiency from electrical to optical power of 32% at 500mW and at a case temperature of 25°C. This helps to reduce power consumption and therefore to extend the battery lifetime.

Over the temperature range of -5 to 40°C, the ML520 G72 can produce up to 500mW of continuous wave (CW) power. The device is even capable to provide pulsed laser light of 600mW at 50°C when operating with a maximum duty cycle of 25% at frequencies of at least 50Hz.

For CW operation at 25°C the threshold current is 170mA. The operating current at 500mW/2.3V is 680mA. The red laser diode is integrated into a standard 5.6mm CAN package.

For more information please contact us:

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