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Product Inquiries

Optical Information Processing Device Marketing Sec.
Mitsubishi Electric Corporation
Tel +81-3-3218-4784
Igusa.Hideaki@ab.MitsubishiElectric.co.jp
<http://www.mitsubishichips.com/Global/>

No. 2498

Media Contact

Public Relations Division
Mitsubishi Electric Corporation
Tel: +81-3-3218-3380
prd.gnews@nk.MitsubishiElectric.co.jp
<http://global.mitsubishielectric.com/news/>

**Mitsubishi Electric's New Red Laser Diode for Pico Projectors
Offers Industry-leading Output Power**

Highly suitable for products that require a high-brightness red light source

Tokyo, January 14, 2010 – Mitsubishi Electric Corporation (TOKYO: 6503) announced today the launch of a 638-nanometer (nm) wavelength red laser diode (LD), ML520G72, which offers the world's highest output power in 638 nm band LDs, making it ideal for pico projectors and other portable display systems that require a red light source with high brightness. Sample shipments will begin on February 1.

Pico projectors have recently come to increasingly garner attention, being embedded in or connected to mobile systems such as cellular phones and laptop computers. Light emitting diodes (LEDs) and LDs are mainly used as the light source in these projectors because they can project a wider range of colors compared to lamp-based projectors. Compared with LEDs, however, LDs deliver higher output power with less power consumption, enabling batteries to last longer. They also enable focus-free operation because optical systems with great depth of field can be used with laser beams.

In July 2009, Mitsubishi Electric launched a 638nm LD that offers 300 milliwatts (mW) output power, high brightness and pure red tone. The new LD offers an even higher output power of 500 mW, currently the world's highest in 638 nm band, which helps achieve high-luminous projectors of up to 60 lumens (lm). By comparison, LED-based projectors typically offer only about 10 lm. In addition, the new LD has an industry-leading electrical conversion ratio of 32% at 500 mW, and at a case temperature of 25 degrees C, which help to reduce power consumption in pico projectors.



ML520G72

The ML520G72 can also be operated at a temperature range of -5 to 40 degrees C when emitting 500 mW continuous waves (CW), and up to 50 degrees C under pulse operation at a duty ratio of 25% or less and frequency of 50Hz or higher.

Product Summary

Model	Price of sample (excluding tax)	Shipment date	Features
ML520G72	JPY 50,000	February 1, 2010	Short wavelength: 638 nm High output power: 500 mW (CW), 600 mW (pulsed) Lateral oscillation mode: multi

Product Characteristics

	Conditions	Typical value
Output power	Continuous wave (CW) @ 25 degrees C	500 mW
Threshold current	CW @ 25 degrees C	170 mA
Operation current	Po = 500 mW, CW @ 25 degrees C	680 mA
Operation voltage	Po = 500 mW, CW @ 25 degrees C	2.3 V
Lasing wavelength	Po = 500 mW, CW @ 25 degrees C	638 nm
Operating temperatures	-5 – 40 degrees C CW	
	-5 – 50 degrees C pulsed	
Package	Standard 5.6 mm-diameter CAN package	

About Mitsubishi Electric

With over 85 years of experience in providing reliable, high-quality products to both corporate clients and general consumers all over the world, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. The company recorded consolidated group sales of 3,665.1 billion yen (US\$ 37.4 billion*) in the fiscal year ended March 31, 2009. For more information visit <http://global.mitsubishielectric.com>

*At an exchange rate of 98 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2009.

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