



Mitsubishi Electric Semiconductors, Japan, founded already in 1921, is a recognized world leader in manufacture, marketing and sales of electronic equipment used in information processing and communications, space development, satellite communications and consumer electronics.

There is a wide range of optical components for fiber-optic data-transmission as well as visible diode lasers for applications like DVD recording, medical and industrial.

Red Laser Line-up (660nm)

Mitsubishi offer a complete range of lasers with 660nm wavelength. For various applications there are all kinds of output powers, for pulse and continuous wave (cw) use. Many customers use those for light detection and ranging (lidar) because of their excellent ultra short pulse performance.

These AlGaInP semiconductor lasers provide single transverse mode oscillation and have a real index waveguide which improves the slope efficiency by reduction of operating current. The special window mirror facet warrants high reliability and high power operation up to 75degC.

Features:

- high reliability
- high output power
- usually available from stock

Applications:

- lidar
- range finders
- sensors

	CW power	pulse power
ML1xx21	80mW	160mW (max)
ML1xx23	100mW	200mW (max)
ML1xx25	100mW	250mW (max)
ML1xx26	100mW	300mW (max)
ML1xx27	120mW	350mW (max)
NEW ML1xx29	120mW	400mW (max)

640nm Laser

With the new ML520G51 Mitsubishi introduce a very high power (150mW CW) laser with a much better visibility than 660nm. For this output, the laser needs just 280mA operating current. The emitter area is ~3x40um with a divergence angle of 7deg parallel and 40deg perpendicular (FWHM).

Features:

- 5.6mm can package
- 150mW cw and 250mW pulse
- excellent visibility

Applications:

- laser show
- laser display
- medical
- sensing

