Solar Panels — Continued

MSX-Lite Modules — SOLAREX

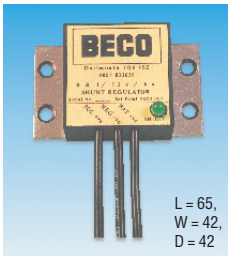
- MSX-10 Lite, 10 watt module
- MSX-20 Lite, 20 watt module
- MSX-30 Lite, 30 watt module
- Light, rugged, easily mounted
- Tedlar®/EVA/stainless steel laminate construction
- 3 metre cable fitted

Mftrs. List No.	L	W	D	Nom. Volts	Amps @ pp	Volts @ pp
SSX-10m Lite	440	270	20	12	0.580	17.1
MSX-30 Lite	620	500	20	12	1.750	17.1

OPT332

Mftrs. List No.	Order Code	Price Each 1+
SSX-10m Lite	**653-974**	
MSX-30 Lite	**.653-998**	

Solar Shunt Regulator — BECO



- 12 Volt, 6 amp solid state shunt regulator
- Temperature compensated
- Fully encapsulated
- LED status indication
- Blocking diode included

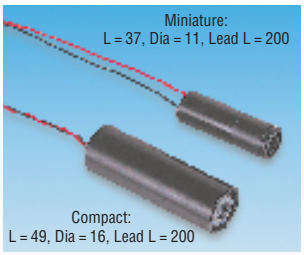
The BECO Solar Shunt Regulator is designed to limit the voltage to which a lead acid battery can be driven when on charge from a photovoltaic (solar) module or array. The unit is set to regulate at 14.6 volts and operation is indicated by an LED. Suitable for use with any 12 volt (nominal) module(s) up to a maximum of 6 amps.

OPT333

Mftrs. List No.	Order Code	Price Each 1+
BR1/12/6	**.653-925**	

Laser Diode Modules

Self-Contained — IMATRONIC



Connections
Red = Supply +ve, Black = Supply -ve

A range of self-contained continuous wave visible laser diode modules. Applications include alignment, bar code readers, robotic control, target designation, positioning and security detection.

- Choice of output wavelengths: 633nm and 670nm
- Output power options: Class 2 (1mW), Class 3a (3, 5mW)
- Choice of housings: 11mm or 16mm
- User adjustable, focusing optics (tool supplied)
- Integral drive circuitry
- Output power stabilisation
- Reverse polarity protection
- LED emission indicator

Wavelengths: 633nm*, 670nm
Beam size at aperture (mm): Miniature - 4 2, Compact - 5 dia. (Class 2) 5 2 (Class 3a)
Focusing range (mm): Miniature - 35-∞, Compact - 150-∞ (Class 2) 20-∞ (Class 3a)
*Approximately nine times brighter than comparable 670nm versions.

Operating voltage: 4V to 6V DC

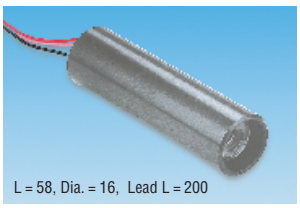
Operating temperature: -10°C to +40°C Storage temperature: -20°C to +65°C
Operational life: MTTF in excess of 10,000 hours at its operating temperature range

WARNING: These devices are laser diode modules and conform to BS (EN) 60825 emission criteria. Do not look directly into the laser beam. Eye protection should be worn as blink response is not sufficient to protect the human eye.
<1mW visible - class II, 3mW & 5mW visible - class IIIa.

OPT224

Module Type	Order Code	Price Each 1+	3+	5+
Miniature, 0.9mW, 670nm	**280-458**			
Miniature, 0.9mW, 633nm	**491-925**			
Miniature, 3mW, 670nm	**280-460**			
Miniature, 5mW, 633nm	**623-313**			
Compact, 0.9mW, 670nm	**280-471**			
Compact, 0.9mW, 633nm	**491-937**			
Compact, 3mW, 670nm	**280-483**			
Compact, 5mW, 633nm	**623-325**			

Self-Contained, Modulatable — IMATRONIC



Connections
Red = Supply +ve, Black = Supply -ve
Pink = TTL modulation input

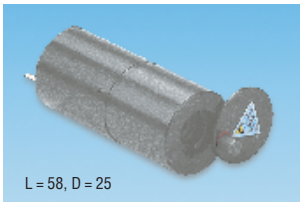
- Choice of output wavelengths: 633nmand 670nm
- Modulated output power: between pre-set max. and 10% max.
- Reverse polarity protection
- Output power options: Class 2 (1mW) Class 3a (3mW)
- User adjustable focusing optics

WARNING: These devices are laser diode modules and conform to BS (EN) 60825 emission criteria. Do not look directly into the laser beam. Eye protection should be worn as blink response is not sufficient to protect the human eye.
<1mW visible - classII, 3mW & 5mW visible - class IIIa.

OPT368

Module Type	Order Code	Price Each 1+	3+	5+
Modulated, 0.9mW, 670nm	**623-283**			
Modulated, 0.9mW, 633nm	**623-295**			
Modulated, 3mW, 670nm	**623-301**			

Laboratory Series — IMATRONIC



- Choice of output wavelengths: 633nm and 670nm
- Integral, power switch and emission indicator
- User adjustable focusing optics
- Output power options: Class 2 (1mW), Class 3a (3mW)
- Shutter fitted to output aperture
- Reverse polarity protection
- Size compatible with 1" optical mounts

Self-contained compact Laboratory Diode Laser available in a choice of visible wavelength models. Ideal replacement for helium neon lasers in many scientific, educational and engineering applications, offering the benefits of superior ruggedness and compact size.

WARNING: These devices are laser diode modules and conform to BS (EN) 60825 emission criteria. Do not look directly into the laser beam. Eye protection should be worn as blink response is not sufficient to protect the human eye.
1mW visible - classII, 3mW & 5mW visible - class IIIa.

OPT366

Module Type	Order Code	Price Each 1+	3+	5+
Laboratory, 0.9mW, 633nm	**623-222**			
Laboratory, 3mW, 670nm	**623-234**			

Laser Cross Generator — IMATRONIC

The Laser Cross Generator (LCG) is a plug-on accessory which, when fitted to the front of a pre-focused miniature laser diode module, see above, projects a laser line cross. The LCG is retained on the front of the miniature laser diode module by means of two 'O' rings and a grab screw. Applications include alignment, measurement, position sensing and inspection.

L = 35, Dia. = 17
Overall length when fitted to a miniature laser diode module = 60

Typical cross size and line thickness (mm)* at 0.5metres: 5 0 1; 2 metres: 160 1.5
Operational wavelength range: 630nm - 820nm. Perpendicularity (two axis): <2 deg.
*Dependent on laser module power and ambient lighting.

OPT367

	Order Code	Price Each 1+	3+	5+
Laser Cross Generator	**623-246**			

254 Semiconductors and Passives Prices are in Singapore Dollars and exclusive of GST