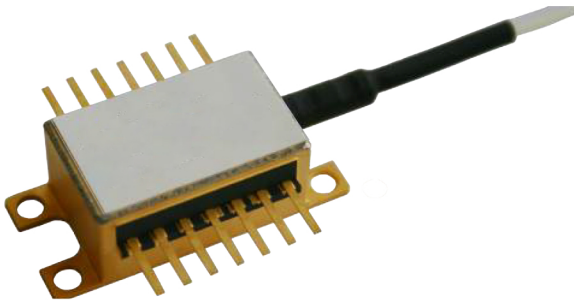


# 1572nm DM LASER

REP1572-DM-B

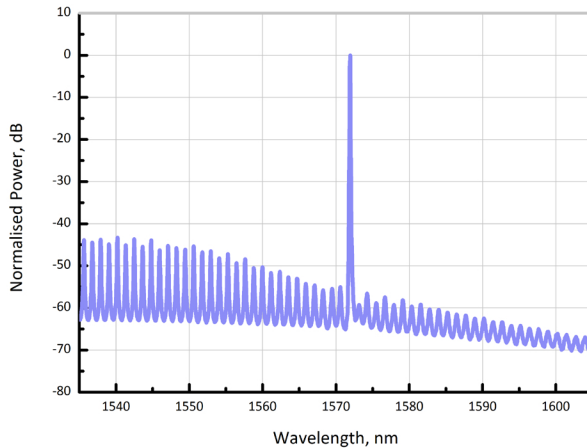


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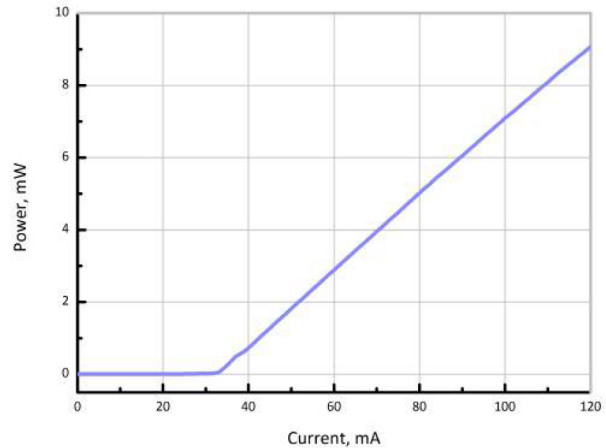


## SUPERIOR SENSISTIVITY

RPMC Lasers REP1572-DM-B laser, available in the 1560-1573nm range, is designed to coincide with CO and CO<sub>2</sub> absorption lines around 1570nm. RPMC's Discrete-Mode (DM) technology enables tunable single-mode operation with no mode-hops, at a competitive price.



Typical optical spectrum at 25° C



Output power as a function of bias current

## ELECTRO-OPTICAL CHARACTERISTICS\* (T<sub>SUB</sub> = 25° C)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Centre Wavelength Range	$\lambda$	1560	1572	1573	nm
Wavelength specification	$\lambda_{spec}$	$\lambda - 1$	$\lambda$	$\lambda + 1$	nm
Side Mode Supression Ratio	SMSR	30	40	-	dB
Threshold Current	$I_{th}$	-	30	35	mA
Output Power in fiber	$P_f$	4	6	-	mW
Optical linewidth	$\Delta f$	-	-	2	MHz
Temperature Tuning Coefficient	$T_\lambda$	0.07	0.1	0.14	nm/°C
Current Tuning Coefficient	$I_\lambda$	0.008	0.014	0.020	nm/mA
Slope Efficiency	SE	0.05	0.1	-	mW/mA
Thermistor Resistance	$R_T$	9.5	10	10.5	k $\Omega$
Thermistor Temp. Coefficient	C	-	-4.4	-	%/°C

\*CW bias unless otherwise stated

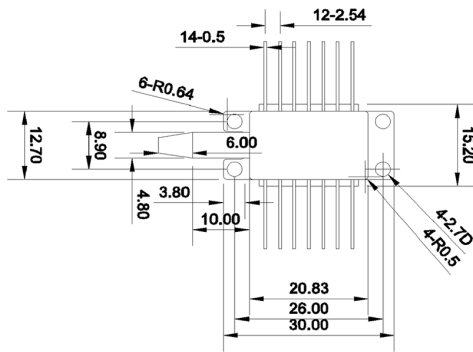
## ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN	MAX	UNIT
Forward Current	$I_f$	-	120	mA
Forward Voltage	$V_f$	-	2	V
TEC Current	$I_{TEC}$	-	1.2	A
Reverse Voltage LD	$V_r$	-	2	V
Reverse Voltage PD	$V_{rev}$	-	20	V
Case Temperature*	$T_{Case}$	-20	65	°C
Chip Submount Temperature	$T_{Sub}$	0	50	°C
Storage Temperature	$T_{storage}$	-40	85	°C

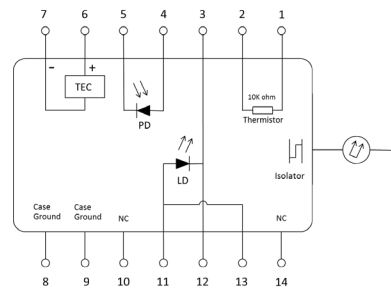
\*For  $T_{sub} < 25^{\circ}C$ , Max Case Temperature should be derated to  $T_{Case,Max} = T_{sub} + 40^{\circ}C$

### PACKAGING

The REP1580-DM-B product series is offered in a 14-pin Butterfly package - Inquire for other packaging options. The standard package pinout is shown below, variations may be requested.



14-pin butterfly schematic



Standard "Pinout 01" option



Wavelength Band

Single Mode

Connector/Fiber:  
FA = FC/APC (SMF)  
FM = FC/APC (PM)

Package Description:  
B = 14 pin butterfly  
01 = pinout



#### Laser Safety

This is a Class 3R Laser Product as defined by International Standard IEC 60825-1, Edition 3. Invisible Laser radiation is emitted from the end of the fiber or connector. Avoid direct eye exposure to the beam. Laser safety labels are not attached to the module due to space limitations but instead are affixed to the outside of the shipping carton.