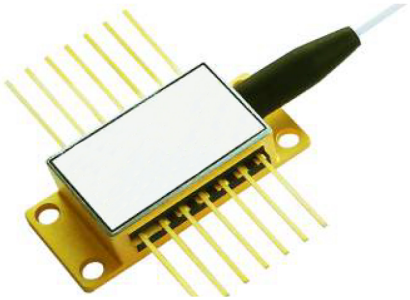
1735nm DM LASER

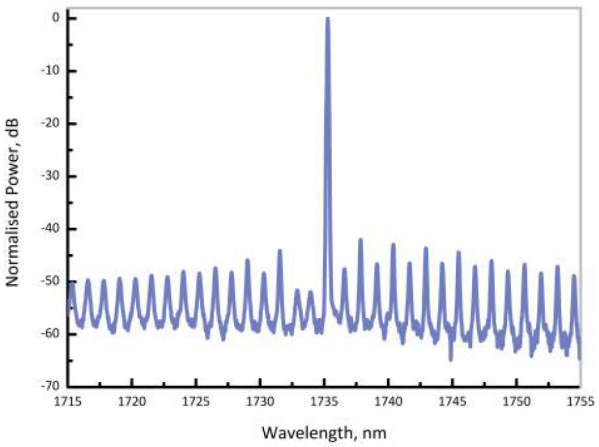
REP1735-DM-B

www.rpmclasers.com

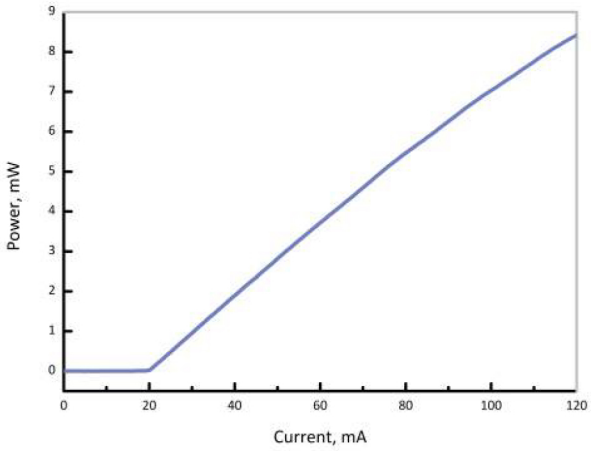


SUPERIOR PERFORMANCE

RPMC Lasers REP1568-DM-B laser diode is a cost effec-tive, highly coherent laser source, designed using **RPMC**'s discrete-mode (DM) technology. Packaged in a 14-pin but-terfly, excellent SMSR and linewidth performance make it suitable for a wide variety of optical sensing applications.



Typical optical spectrum of 1735DM laser at 80mA



Representative LIV from 1742nm laser

ELECTRO-OPTICAL CHARACTERISTICS* (T_{SUB} = 25° C)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Available Wavelength Range	λ	-	1735	-	nm
Wavelength Tolerance	λ_{spec}	λ -1	λ	λ +1	nm
Side Mode Supression Ratio	SMSR	30	40	-	dB
Threshold Current	I_{th}	-	20	25	mA
Output Power in fiber	P_f	3	5	-	mW
Optical linewidth	Δf	-	-	2	MHz
Temperature Tuning Coefficient	T_λ	0.07	0.1	-	nm/°C
Current Tuning Coefficient	I_λ	10	15	-	pm/mA
Slope Efficiency	SE	0.05	0.08	-	mW/mA
Thermistor Resistance	R_T	9.5	10	10.5	kΩ
Thermistor Temp. Coefficient	C	-	-4.4	-	%/°C

*CW bias unless otherwise stated

RPMC Lasers, Inc. 8495 Veterans Memorial Pkwy | O'Fallon, MO 63366
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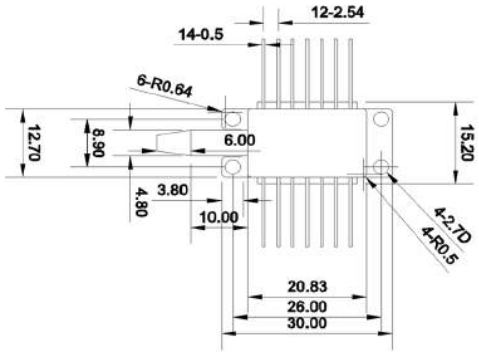
ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN	MAX	UNIT
Forward Current	I_f	-	140	mA
Forward Voltage	V_f	-	2	V
TEC Current	I_{TEC}	-	1.2	A
Reverse Voltage LD	V_{rev}	-	2	V
Case Temperature*	T_{Case}	-20	65	°C
Chip Submount Temperature	T_{Sub}	0	50	°C
Storage Temperature	$T_{storage}$	-40	85	°C

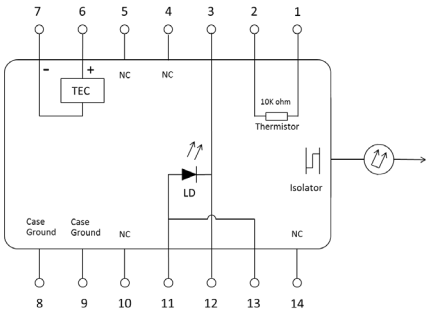
*For T_{sub} < 25°C, Max Case Temperature should be derated to $T_{Case,Max} = T_{sub} + 40°C$

PACKAGING

The REP1692-DM-B product series is offered in a 14-pin But-terfly package - Inquire for other packaging options. The standard package pinout is shown below, variations may be requested.



14-pin butterfly schematic



Standard ''Pinout 06'' option

REP1735 – 0 – DM – B06 – FM

- REP1735 – Wavelength Band
- 0 – Single Mode
- DM – Single Mode
- B06 – Package Description: B = 14 pin butterfly, 06 = pinout
- FM – Connector/Fiber: FA = FC/APC (SMF), FM = FC/APC (PM)

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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.