

Photovoltaic Power Converter

KPC8H-FC

Characteristics

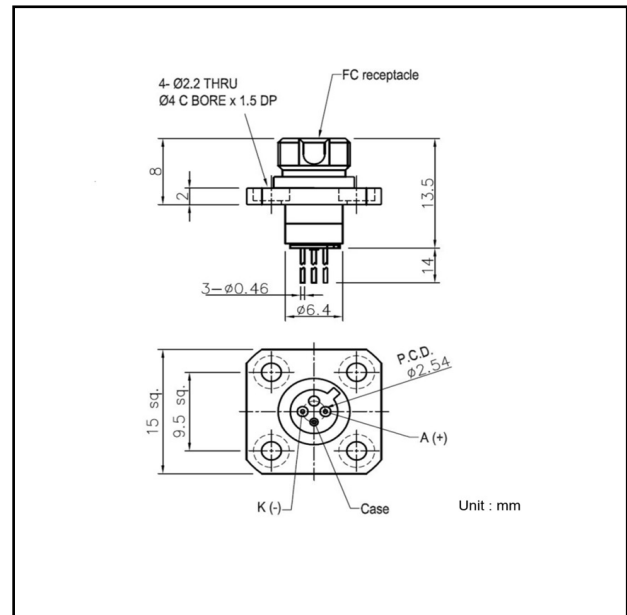
- Conversion of 1300-1600nm laser light into electric power
- Up to 3.1V-48mA output
- FC receptacle
- Complete electrical isolation

Applications

- Remote powered equipments
- Electro-magnetic sensitive antenna

Package

- MODULE



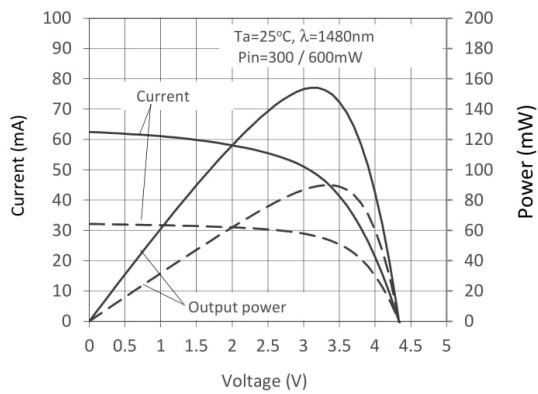
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Maximum optical power input	P_{imax}	600	mW	-
Output current	I_{out}	± 65	mA	-
Operating temperature	T_{opr}	-40 to +70		Avoid dew condensation
Storage temperature	T_{stg}	-40 to +85		Avoid dew condensation

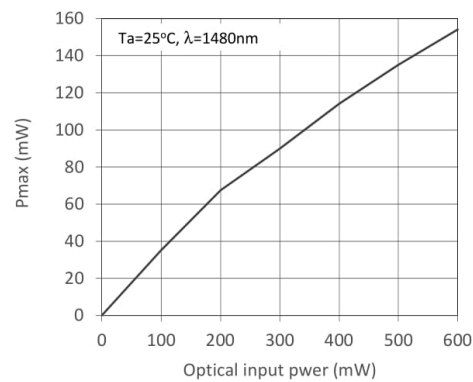
Electrical and Optical characteristics (Ta=25 unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Sensitive wavelength		1300	-	1600	nm	-
Maximum output power	P_{max}	-	88	-	mW	=1480nm Pin=300mW
Open circuit voltage	V_{op}	-	4.3	-	V	=1480nm Pin=300mW
Short Circuit Current	I_{sh}	-	32	-	mA	=1480nm Pin=300mW
Conversion efficiency		-	30	-	%	=1480nm Pin=300mW
Operating wavelength	λ_{op}	1300	-	1600	nm	-

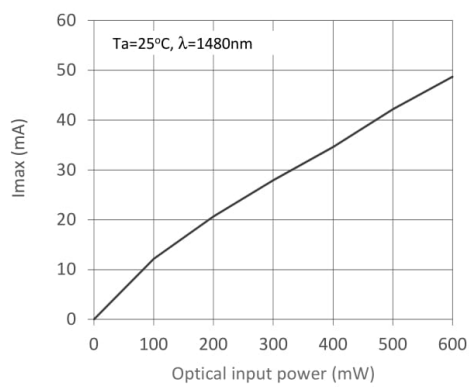
Current, Output Power - Voltage



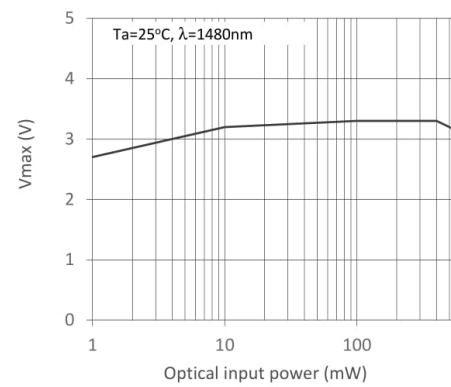
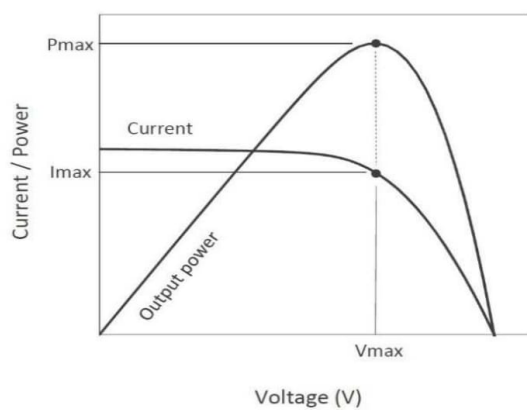
Pmax - Optical Input Power



Imax - Optical Input Power



Vmax - Optical Input Power

Definition of P_{max} , I_{max} and V_{max} **Caution:**

FC receptacle and PV part are fixed by welding.

To mount this module, 4 holes on the FC receptacle shall be used.

Do not put any excessive stress on the PV part to avoid misalignment or fatal damage.

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