

Photovoltaic Power Converter

KPC8H-FC

Characteristics

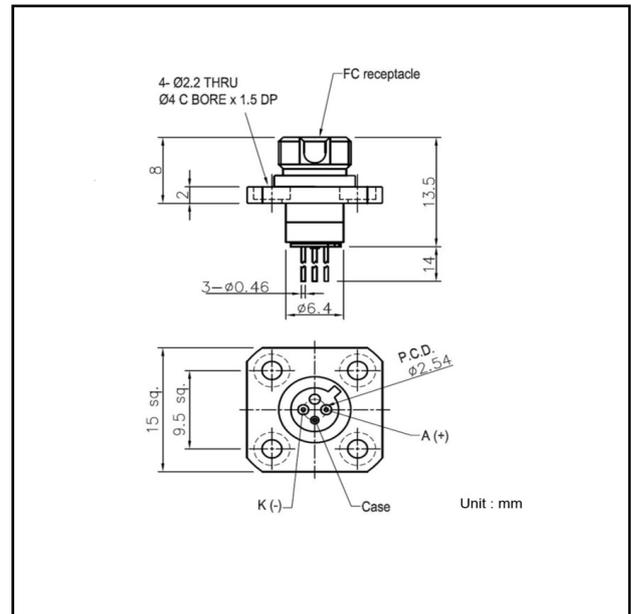
- Conversion of 1300-1600nm laser light into electric power
- Up to 3.1V-48mA output
- FC receptacle
- Complete electrical isolation

Applications

- Remote powered equipments
- Electro-magnetic sensitive antenna

Package

- MODULE



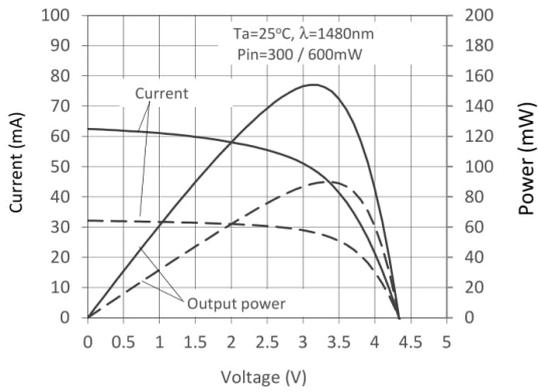
## Absolute Maximum Ratings

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

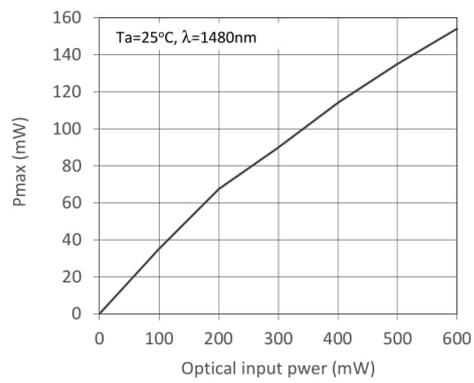
## Electrical and Optical characteristics (Ta=25 unless otherwise noted)

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	$\lambda_{op}$	1300	-	1600	nm	-

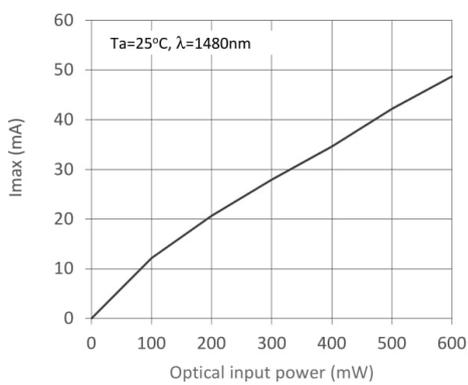
Current, Output Power - Voltage



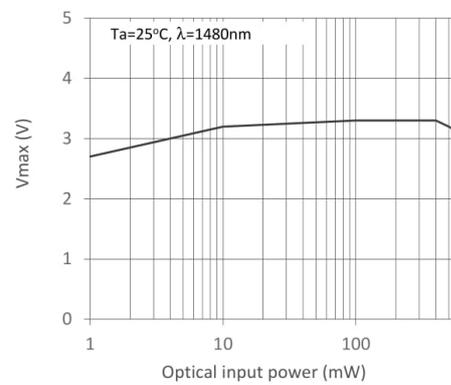
Pmax - Optical Input Power



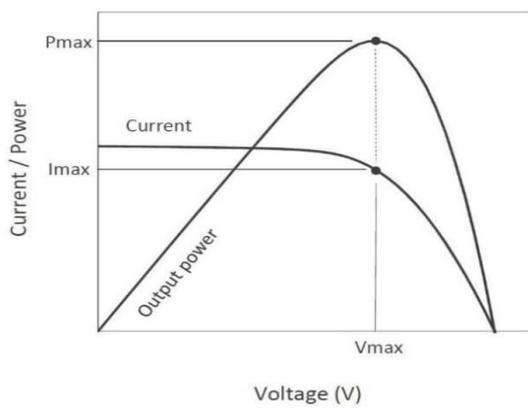
I<sub>max</sub> - Optical Input Power



V<sub>max</sub> - Optical Input Power



Definition of P<sub>max</sub>, I<sub>max</sub> and V<sub>max</sub>



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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