

PV-TD185MF5

PHOTOVOLTAIC MODULE



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Through its involvement in satellite applications of solar technology, Mitsubishi Electric has pushed the boundaries in photovoltaic development for decades.

This leading edge power generation technology has now been applied by Mitsubishi Electric to products and systems for terrestrial applications. Mitsubishi Electric constantly focuses its efforts on increasing performance, quality and reliability for the present and future demands of all users.

Reliability

- Original derating design concept
- Straight tabs
- Double-sided independent tabs
- Lower slope of module frame
- Static load test - 5400Pa passed with Protection Bar
- High tensile structure
- Enhanced water drainage structure
- Enhanced corrosion resistant frame
- Max. system voltage of 1000v

Efficiency

- Solder-coatingless cells
- Fine grid electrodes
- BSF (back surface field) structure
- Anti-reflective coating
- Unique bus bar design
- Back film reflected light
- High reflectance back film
- Celium-free/High transmittance glass
- Tight tolerance: +/- 3%

Safety

- Triple-layer structure junction box
- High reliability bypass diode
- Lock mechanism equipped connectors
- Lighter weight - 17kg per module
- Conformity with IEC61215 2nd edition, TUV safety class II, EN61730

Eco-friendly

- Lead-free solder PV module
- Manufactured in ISO 14001 certified manufacturing plant
- Recyclable steel pallets



Technical Information



PV-TD185MF5

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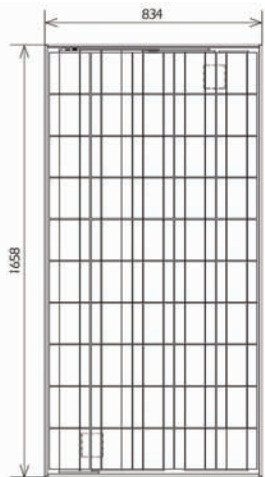
Specifications

Model	PV-TD185MF5
Cell type	Polycrystalline Silicon, 156mm x 156mm
Number of cells	50 cells in a series
Maximum power rating (Pmax)	185W
Minimum power rating (Pmax)	179.5W
Tolerance of maximum power rating	+3/-3%
Open circuit voltage (Voc)	30.6V
Short circuit current (Isc)	8.13A
Maximum power voltage (Vmp)	24.4V
Maximum power current (Imp)	7.58A

Normal operating cell temperature (NOCT)	47.5°C
Maximum system voltage	DC 1000v
Fuse rating	16A
Dimensions	1658x834x46mm
Weight	17kg
Output terminal	(+) 800mm/(-) 1250mm with MC connector (PV-KBT4/6II-UR, PV-KST4/6II-UR)
Module efficiency	13.4%
Packing condition	2 pcs - 1 carton
Certificate	IEC 61215 edition 2 (static load test 5400Pa passed) EN 61730, TUV Safety Class II

Dimensions (mm)

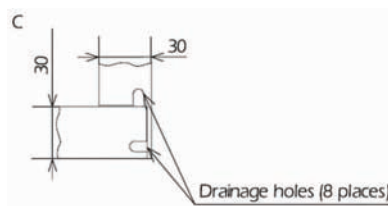
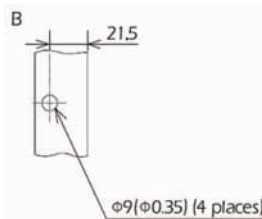
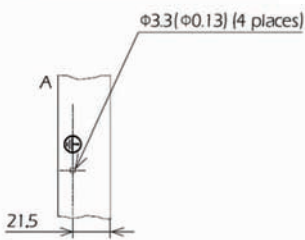
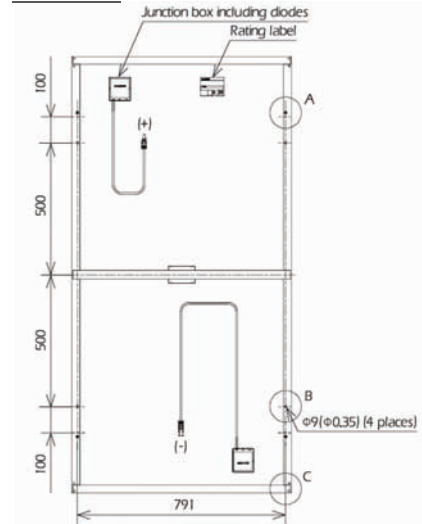
Front View >



Side View >



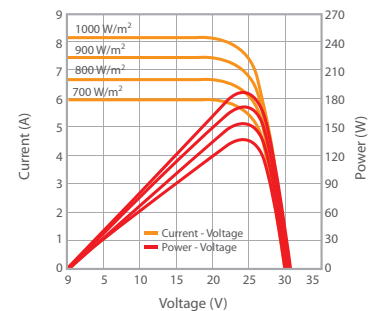
Rear View >



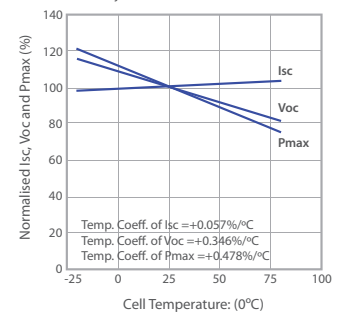
Electrical Characteristics

Electrical Performance

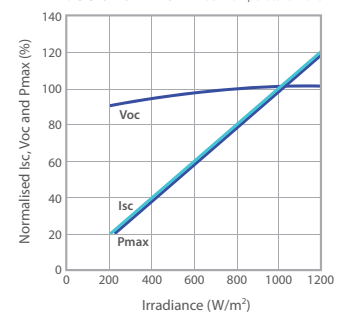
Cell Temperature: 25°C



Temperature Dependence of Isc, Voc and Pmax



Irradiance Dependence of Isc, Voc and Pmax



Changes for the Better

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