



**MITSUBISHI  
ELECTRIC**

PHOTOVOLTAIC MODULE

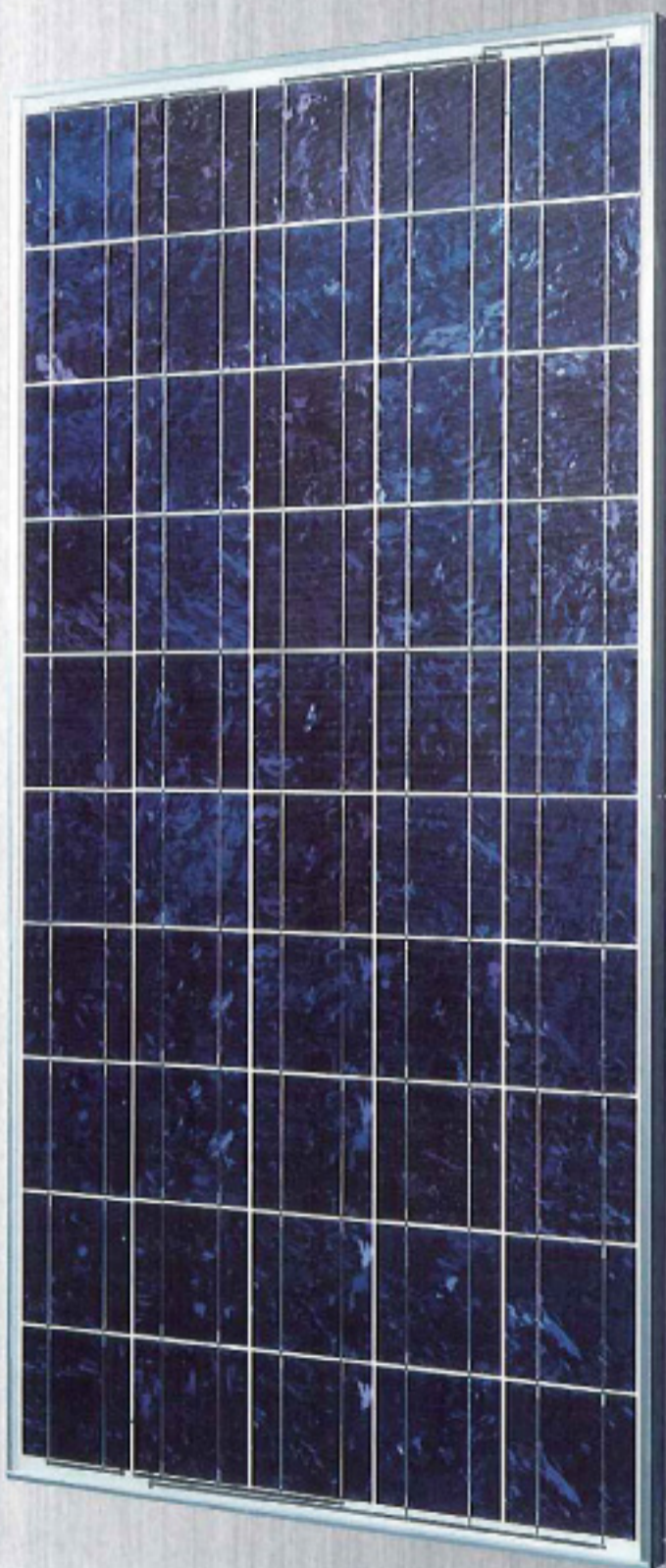
**T D series**

PV-TD190MF5 190Wp

PV-TD185MF5 185Wp

PV-TD180MF5 180Wp

PV-TD175MF5 175Wp



*Changes for the Better*



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**High 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
- Cellium-Free/High-Transmittance Glass
- Tightest Tolerance:  $\pm 3\%$
- High Power in Actual Use

**High Reliability**

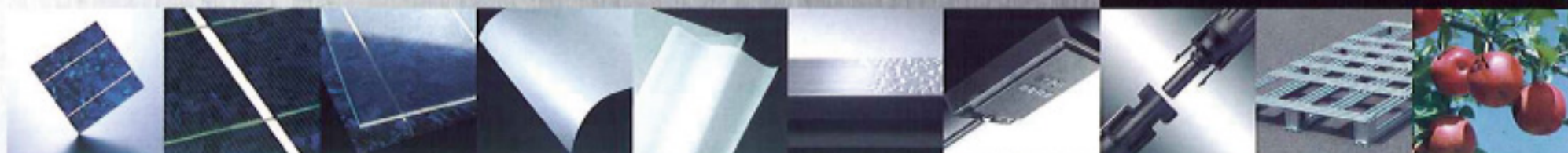
- Original derating designing concept
- Straight Tabs
- Double-Sided Independent Tabs
- Lower slope of module frame
- Static Load Test 5400 Pa passed with Protection Bar
- Higher Tensile Strength Structure
- Better Water Drainage Structure
- High-Corrosion Resistant Frame
- Max. System Voltage 1000V with Four-Layer Structure Back Film

**High Safety**

- Triple-Layer Structure Junction Box
- Highly Reliable Bypass Diode
- Lock Mechanism Equipped Connectors
- Lighter Weight 17.0kg per module
- Conformity with IEC61215 2nd edition, TUV Safety Class II, EN61730

**Eco-Friendly**

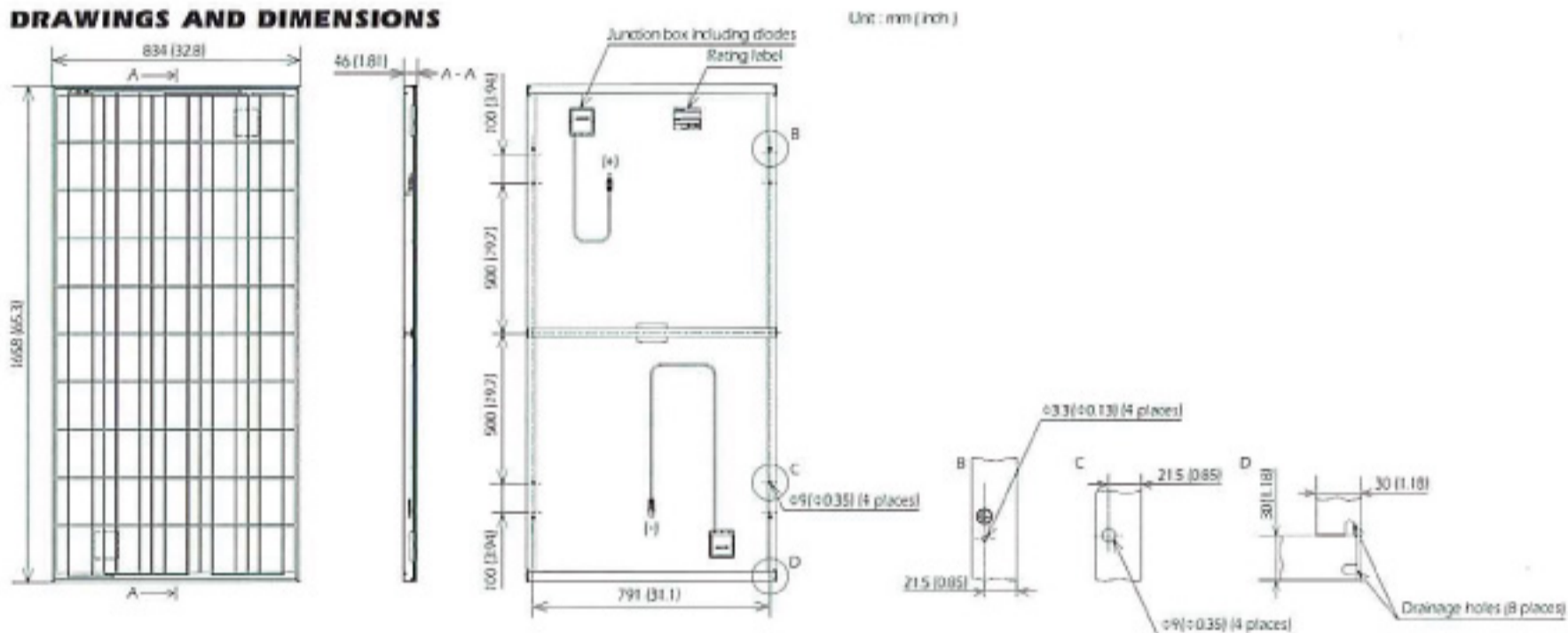
- Lead-free solder PV module
- Manufactured in the plant certified ISO 14001
- Recyclable steel pallets



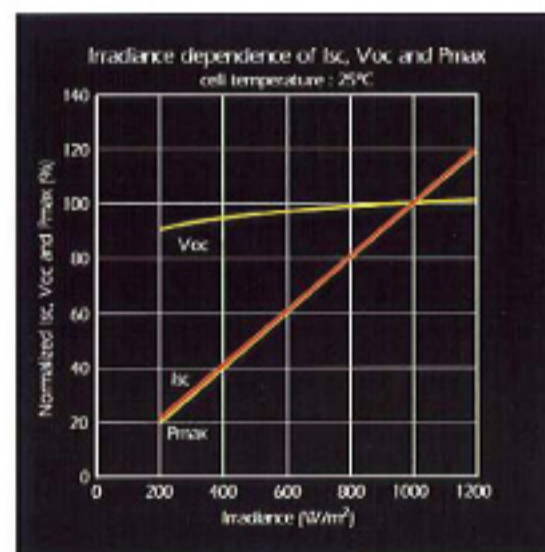
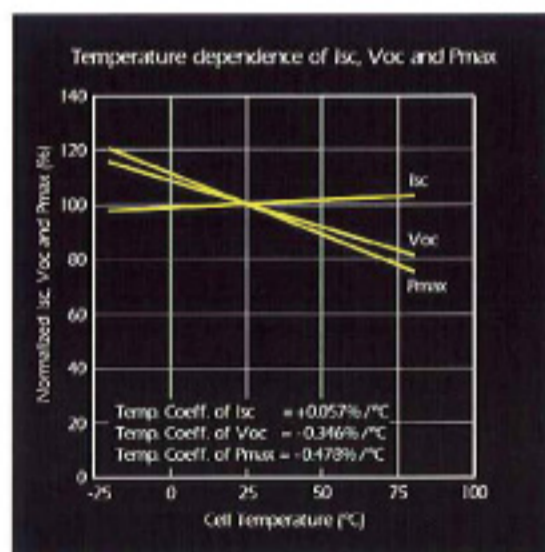
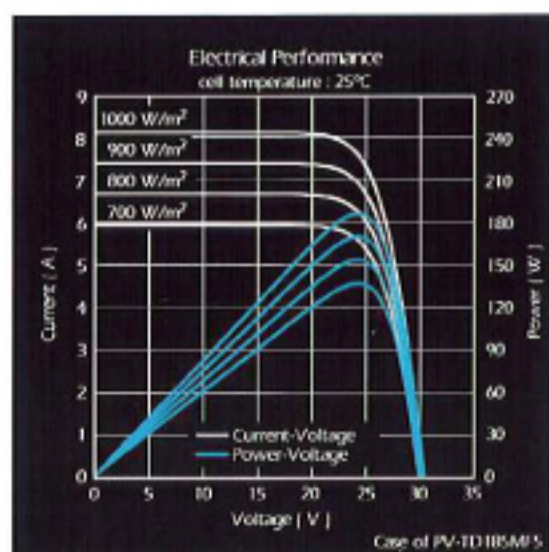
**SPECIFICATION SHEET**

Manufacturer	MITSUBISHI ELECTRIC			
Model name	PV-TD190MF5	PV-TD185MF5	PV-TD180MF5	PV-TD175MF5
Cell type	Polycrystalline Silicon, 156mm x 156mm			
Number of cells	50 cells in a series			
Maximum power rating(Pmax)	190W	185W	180W	175W
Warranted minimum Pmax	184.3W	179.5W	174.6W	169.8W
Tolerance of maximum power rating	+3/-3%			
Open circuit voltage (Voc)	30.8V	30.6V	30.4V	30.2V
Short circuit current (Isc)	8.23A	8.13A	8.03A	7.93A
Maximum power voltage (Vmp)	24.7V	24.4V	24.2V	23.9V
Maximum power current (Imp)	7.71A	7.58A	7.45A	7.32A
Normal operating cell temperature(NOCT)	47.5 degree C			
Maximum system voltage	DC 1000V			
Fuse rating	15A			
Dimensions	1658x834x46mm (65.3x32.8x1.81inch)			
Weight	17kg (37lbs.)			
Output terminal	(+) 800mm/(-) 1250mm with MC connector (PV-KBT4/6II-UR, PV-KST4/6II-UR)			
Module efficiency	13.7%	13.4%	13.0%	12.7%
Packing condition	2 pcs - 1 carton			
Certificate	IEC 61215 edition 2(static load test 5400Pa passed), EN 61730, TUV Safety Class II			

**DRAWINGS AND DIMENSIONS**



**ELECTRICAL CHARACTERISTICS**



**MITSUBISHI ELECTRIC CORPORATION**

HEAD OFFICE: TOKYO BLDG., 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN  
<http://Global.MitsubishiElectric.com/solar>