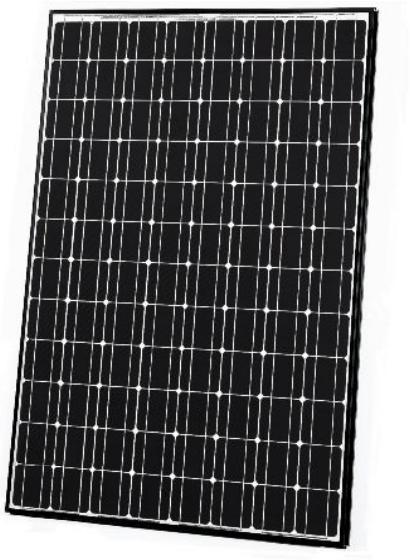
HIT PHOTOVOLTAIC MODULES

Models: HIP-180BA3, HIP-186BA3, HIP-190BA3, HIP-195BA3, HIP-200BA3, HIP-205BA3



Power Output: 180 - 205 Watts

Cell Efficiency: 17.8% - 20.2%

Module Efficiency: 15.3% - 17.4%

Proprietary Technology

SANYO HIT (**H**eterojunction with **I**ntrinsic **T**hin layer) solar cells are hybrids of single crystalline silicon surrounded by ultra-thin amorphous silicon layers.

High Efficiency

SANYO HIT solar panels are a leader in cell and module efficiency. With models up to 16.2 Watts per sq. foot (17.4% module efficiency) you obtain maximum power within a fixed amount of space. You save costs for using fewer support materials, wiring, and spend less time installing. The powerful modules are ideal for grid-connected solar systems, areas with performance-based incentives, and renewable energy credits.

Temperature Attributes

As temperatures rise, SANYO HIT solar panels produce more electricity (kWh) than conventional crystalline silicon solar panels at the same temperature.

Unique Structure

SANYO HIT solar panels have a black anodized double-wall aluminum frame. The panels come pre-equipped with a touch-safe junction box, lead wires, MC™ plug-n-play connectors, and a unique mounting lip, all of which help to minimize support structure materials, installation time and costs.

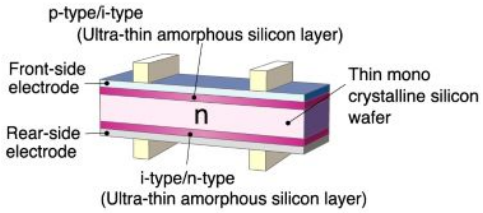
Valuable Features

SANYO HIT solar panels have no moving parts and weigh less than 31 pounds (14kg). The panels are 100% emission and noise free. The panels come with a 20-year Limited Power Output Warranty and a 2-year Limited Product Workmanship Warranty. Panels are UL 1703 safety rated for wind, fire and hail. You can transport the panels to a site using less space and our eco-package minimizes cardboard waste deposited in a customer's trash.

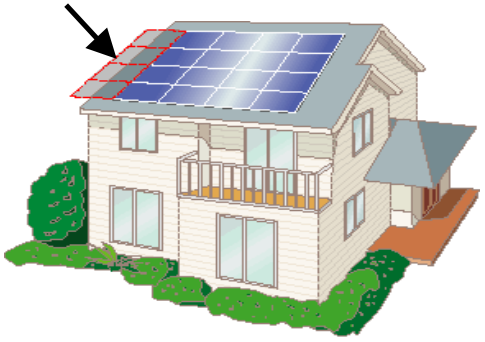
Quality, Ratings, Reliability

SANYO silicon wafers are manufactured in the USA, and the panels are assembled in Mexico. All SANYO solar factories in North America are ISO 9001 and 14001 certified. The panels undergo strict inspections to ensure electrical, mechanical, environmental, and visual compliance. SANYO's conservative model ratings give customers more kWh per rated kW, and assist to more accurately predict performance and financial economics.

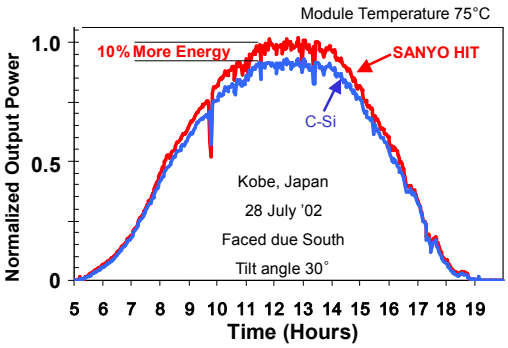
SANYO HIT Solar Cell Structure



Unnecessary Section When Using SANYO HIT



Increased Energy When Using SANYO HIT



Models HIP-xxxBA3

Electrical Specifications		180	186	190	195	200	205
Rated Power (Pmax)[1]	W	180	186	190	195	200	205
Maximum Power Voltage (Vpm)	V	54.0	54.4	54.8	55.3	55.8	56.7
Maximum Power Current (Ipm)	A	3.33	3.42	3.47	3.53	3.59	3.62
Open Circuit Voltage (Voc)	V	66.4	67.0	67.5	68.1	68.7	68.8
Short Circuit Current (Isc)	A	3.65	3.71	3.75	3.79	3.83	3.84
Minimum Power (Pmin)	W	162.0	167.4	171.0	175.5	180.0	184.5
Max System Voltage (Vsys)	V	600	600	600	600	600	600
Series Fuse Rating	A	15	15	15	15	15	15
Temperature Coefficient (Pmax)	%/°C	-0.33	-0.30	-0.30	-0.30	-0.29	-0.29
Temperature Coefficient (Voc)	V/°C	-0.173	-0.168	-0.169	-0.170	-0.172	-0.172
Temperature Coefficient (Isc)	mA/°C	1.10	0.85	0.86	0.87	0.88	0.88
Electrical Tolerance	%	+/- 10	+/- 10	+/- 10	+/- 10	+/- 10	+/- 10
PTC Rating[2]	W	168.0	174.9	178.7	183.5	188.7	193.4
Cell Efficiency	%	17.8	18.4	18.8	19.3	19.7	20.2
Module Efficiency	%	15.3	15.8	16.1	16.5	17.0	17.4
Power per Square Foot	W	14.2	14.7	15.0	15.4	15.8	16.2

Mechanical Specifications

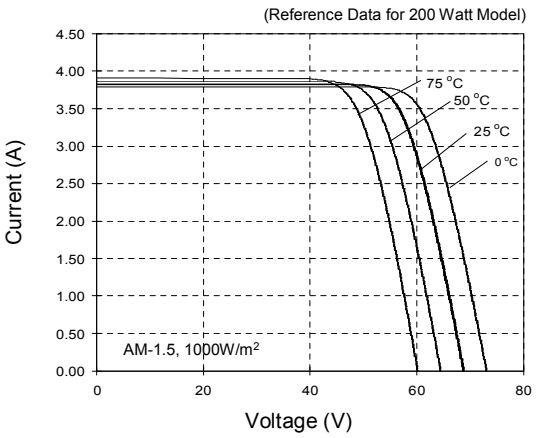
Internal Bypass Diodes	4 Bypass Diodes
Module Area (m^2)	12.69 Ft^2 (1.18m^2)
Weight (kg)	30.86 Lbs. (14kg)
NOCT (°C)	112°F (44.2°C)
Dimensions LxWxH (mm)	51.9x35.2x1.4in (1319x894x35mm)
Cable Length -Male/+Female (mm)	30.7/24.8in (780/630mm)
Cable Size / Connector Type	No.12 AWG / MC™ Connectors
Static Load Wind / Snow (Pa)	50PSF (2400Pa) / 39PSF (1876Pa)
Pallet Dimensions LxWxH (mm)	53x36x63in (1346x912x1600mm)
Pieces per Full Pallet / Weight (kg)	36pcs / 1102 Lbs (500kg)
Quantity per 20'/40'/53' Container	360pcs / 756pcs / 972pcs

Standard Operating Conditions (SOC) and Safety Ratings

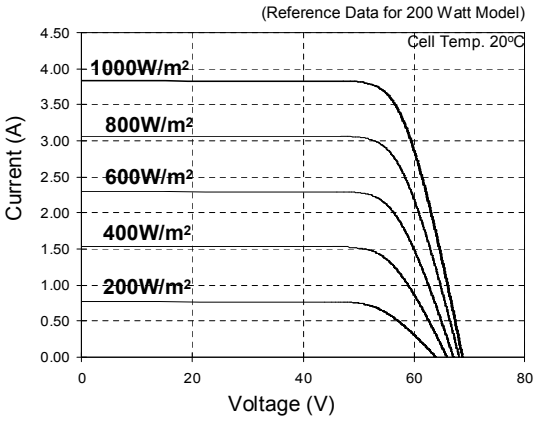
SOC Temperature[3]	-4°F to 104°F[3] (-20°C to 40°C)
SOC Relative Humidity	45% to 95%
Hail Safety Impact Velocity	1" hailstone (25mm) at 52mph (23m/s)
Fire Safety Classification	Class C
Safety & Rating Certifications	UL 1703, cUL, CEC
Limited Warranties	2 Years Workmanship / 20 Years Power Output

[1]STC: Cell Temp. 25°C, AM1.5, 1000W/m^2 [2]PTC: Ambient Temp. 20°C, AM1.5, 1000W/m^2, 1m/s Wind [3]Range defined as the monthly average low and high of the installation location

Dependence on Temperature



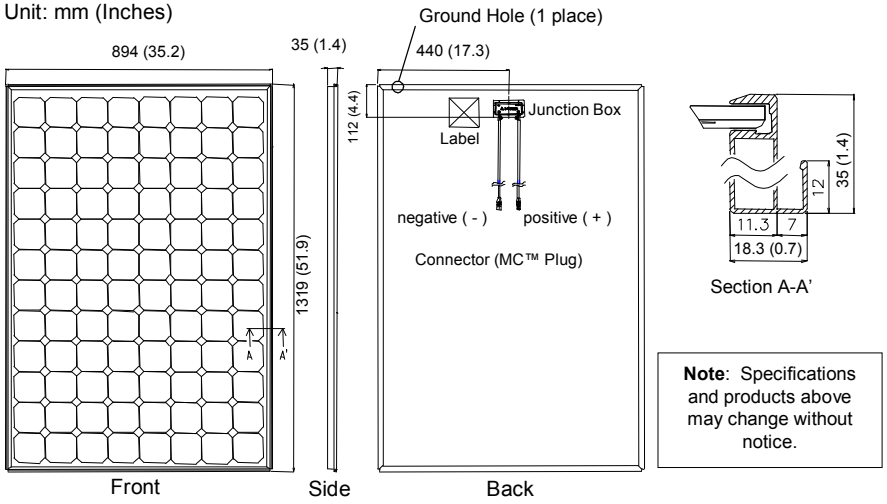
Dependence on Irradiance



CAUTION! **Read the operating instructions carefully before use of these products.**

Dimensions

Unit: mm (Inches)



Note: Specifications and products above may change without notice.

Visit www.sanyo.com or contact our Authorized Representatives for more information: