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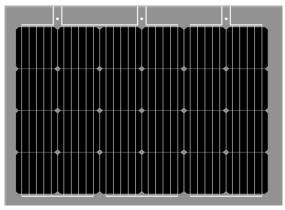
REFERENCE		SI-ESF-M-BIPV-TL-	M158-24
ELECTRICAL CHARACTERISTICS		**STC**	
Maximum Power	[Pmpp]	Wp	136
Power selection	[Pmpp]	Wp	0/±5
Voltage at Maximum Power	[Vmpp]	Volts	13,97
Current at Maximum Power	[Impp]	Amperes	9,70
Open Circuit Voltage	[Voc]	Volts	16,27
Short circuit Current	[Isc]	Amperes	10,18
Maximum System Voltage	[Vsyst]	Volts	1500 / 1000
Maximum Series Fuse Rating	[Icf]	Amperes	15
Efficiency	[ηm]	%	16,88
Form Factor	[FF]	%	81,81
ELECTRICAL CHARACTERISTICS		**NMOT**	
Maximum Power	[Pmpp]	Wp	100
Voltage at Maximum Power	[Vmpp]	Volts	12,72
Current at Maximum Power	[Impp]	Amperes	7,88
Open Circuit Voltage	[Voc]	Volts	14,87
Short circuit Current	[Isc]	Amperes	8,26
MECHANICAL CHARACTERISTICS			
Dimensions	(X)	mm	1056
	(Y)	mm	760
	(Z)	mm	10
	(area)	m2	0,80
Weight		kg	18,43
Frame		Material	Al-6063-T5
		mm	10
Front		Material	Glass
		mm	4
Encapsulant		Material	PVB
		mm	0,76
Cells		Type	mono (sc-Si)
		Size	158,75 x 158,75
		Matrix	6 x 4
		Quantity	24
Encapsulant		Material	PVB
		mm	0,76
Rear		Material	Glass
		mm	4
JUNCTION BOX			
Protection	Grade	IP	67
Diodes	Bypass	Quantity	4
Cables	(+/-)	Quantity	2
		Length	450
		Section	4
Connectors	(+/-)	Type	MC-T4
		Quantity	2
THERMAL CHARACTERISTICS			
Temperature coefficient of short circuit current α	[Isc]	%/º C	0,0814
Temperature coefficient of open circuit voltage β	[Voc]	%/º C	-0,391
Temperature coefficient of maximum power γ	[Pmpp]	%/º C	-0,5141
Temperature coefficient of current at maximum power	[Impp]	%/º C	0,10
Temperature coefficient of voltage at maximum power	[Vmpp]	%/º C	-0,38
Nominal Module Operating Temperature	[NMOT]	º C	47±2
TOLERANCES			
Working temperature		º C	-40/+85
Dielectric Isolation Voltage		V/DC	3000
Relative humidity		%	0/+100
Wind resistance		Pa	2400
Mechanical load-bearing capacity		Pa	8000
Maximum hail resistance		Ø	35
		m/s	97
Conductivity at ground		Ω	≤ 0.1
Resistance		Ω	≥ 100
CLASSIFICATIONS			
Application		Class	A
Electrical protection		Class	II
Fire resistance		Class	A
Pollution		Degree	1
Material		Group	I
Safety		Factors	1.5
GUARANTEES			
Manufacturing Defects		Years	12
Performance	90% of rated power	Years	12
	80% of rated power	Years	25

DESCRIPTION

Silicon Cell Photovoltaic Module mono (sc-Si), BIPV-Roof Tiles series, for architectural integration, from the manufacturer SOLAR INNOVA, maximum power (Wp) 136 W, voltage at maximum power (Vmp) 13,97 V, current at maximum power (Imp) 9,70 A, open circuit voltage (Voc) 16,27 V, short cirtuit current (Isc) 10,18 A, efficiency 16,88, composed of 24 cells, cells, front layer tempered glass thick 4 mm, encapsulating layers of cells PVB, back layer of tempered glass thick 4 mm, junction box (diodes, cables 4 mm2, 450 mm y connectors MC-T4), working temperature -40/+85 ºC, dimensions 1056x760 mm, resistencia a la carga del viento 2400 Pa, resistencia a la carga de nieve 8000 Pa, weight 18,43 kg.