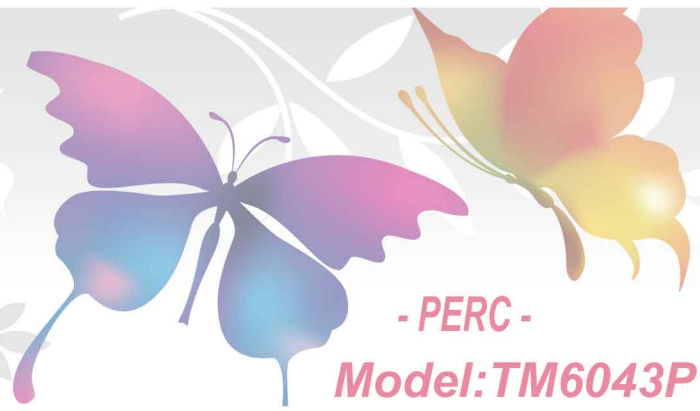


Tamrons
www.tamrons.com

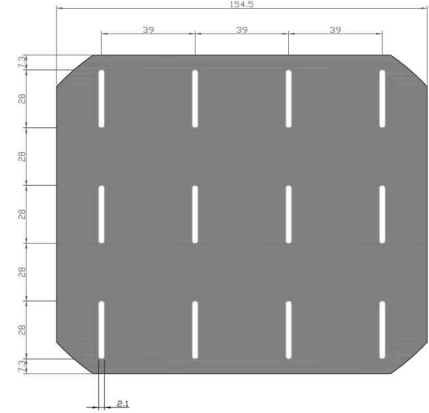
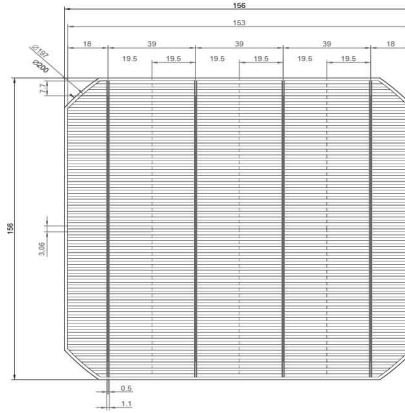


- PERC -
Model: TM6043P

Monocrystalline Solar Cells

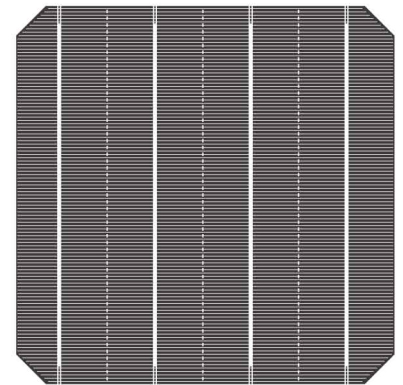
Features

- Color Uniformity, Low Breakage rate
- 100% in-line optical and electrical inspection
- Long-term stability, reliability and performance
- Outstanding power output even in low light or high
- Optimized design for ease of soldering and lamination
- High conversion efficiencies resulting in superior power
- Compatible with present module manufacturing process
- 100% inspected for shunt resistance and reverse current
- regularly monitor product performance and soldering properties
- PID resistant confirmed by all major customers and testing labs



Physical Characteristics

Dimension	156mm X 156mm ± 0.5mm
Thickness	180 μm ± 30 μm, 200 μm ± 30 μm
Front (-)	Acid texturized surface with Silicon nitride anti-reflecting coating Color: Dark Blue, Blue, Sky Blue & Light Blue 4 X 1.1 mm ± 0.1 mm wide bus bars, Distance between bus bars : 39 mm
Back (+)	aluminum back surface field 4 X 3 soldering pads, 2.1 mm ± 0.15 mm wide bus bars Distance between bus bars : 39 mm



Electrical Characteristics

Efficiency Code		196	194	192	190	188	186	184	182	180	178
Efficiency	Eff(%)	19.60	19.40	19.20	19.00	18.80	18.60	18.40	18.20	18.00	17.80
Power	Pmpp(W)	4.77	4.72	4.67	4.62	4.58	4.53	4.48	4.43	4.38	4.33
Max Power Current	Impp(A)	8.628	8.585	8.535	8.508	8.474	8.437	8.407	8.373	8.320	8.246
Short Circuit Current	Isc(A)	9.109	9.069	9.014	8.990	8.954	8.914	8.883	8.847	8.786	8.710
Max Power Voltage	Vmpp(V)	0.553	0.550	0.547	0.543	0.540	0.536	0.533	0.529	0.526	0.525
Open Circuit Voltage	Voc(V)	0.659	0.656	0.650	0.646	0.642	0.638	0.634	0.630	0.628	0.626

Standard test condition: AM1.5, 1000W/m², 25°C

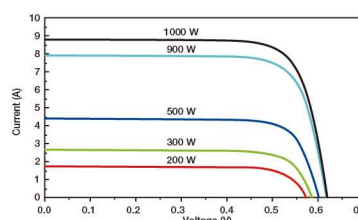
Average accuracy of all tests is +/-1.5% rel.

Temperature Coefficients

Current Temperature Coefficient	α (ISC)	0.05%/K
Voltage Temperature Coefficient	β (VOC)	-0.30%/K
Power Temperature Coefficient	γ (Pmax)	-0.37%/K

Standard test condition: AM1.5, 1000W/m², 25°C

Typical Current-Voltage Curve



Typical Spectral Response

