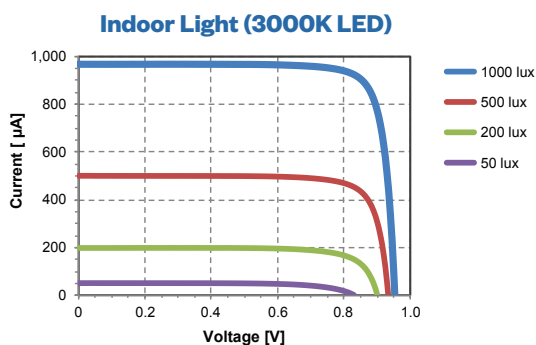
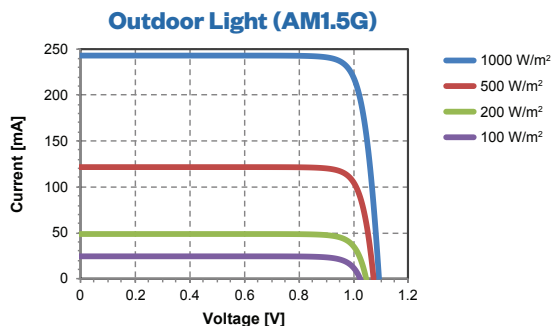
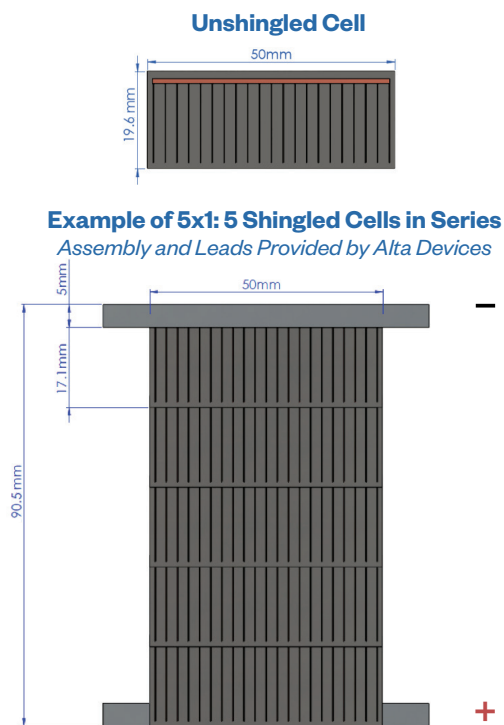


## Technology Brief - Single Junction

This technology performance brief is for the single junction Gallium Arsenide photovoltaic product currently produced by Alta Devices. Cell-to-cell interconnect and cover lamination can be provided at customer's request.



### Mechanical Characteristics

Unshingled Area	mm	50 x 19.6
Shingled Area	mm	50 x 17.1
Density (Unshingled)	g/m <sup>2</sup>	114
Weight per cell (Unshingled)	g	0.112
Flexibility		Recommend 5 cm radius of curvature or greater

### Temperature Coefficients

Open Circuit Voltage (Voc)	[%/°C]	-0.19
Short Circuit Current (Isc)	[%/°C]	+0.08
Max Power Voltage (Vmp)	[%/°C]	-0.17
Max Power Current (Imp)	[%/°C]	+0.08
Power (Pmp)	[%/°C]	-0.09

Percent change per °C from 25 °C

### Electrical Characteristics

		AM1.5, 1000W/m <sup>2</sup> , 25°C	Estimated at AMO, 1366W/m <sup>2</sup> , 25°C	Indoor Light, 3000K LED, 200 lux, 25°C	
Efficiency	[%]	26	23	--	--
Power per cell (Unshingled)	[W]	0.25	0.30	µW	152
Power per cell (Shingled)	[W]	0.22	0.26	µW	132
Power density	[W/m <sup>2</sup> ]	260	310	µW/cm <sup>2</sup>	15
Fill Factor (FF)	[%]	84	83	%	76
Open Circuit Voltage (Voc)	[V]	1.10	1.12	V	0.90
Max Power Voltage (Vmp)	[V]	0.97	0.97	V	0.88
Short Circuit Current (Isc)	[mA]	240	286	µA	193
Max Power Current (Imp)	[mA]	229	273	µA	150

Values correspond to shingled cells and represent optimal performance unless otherwise stated. Actual performance depends on product size and encapsulation.