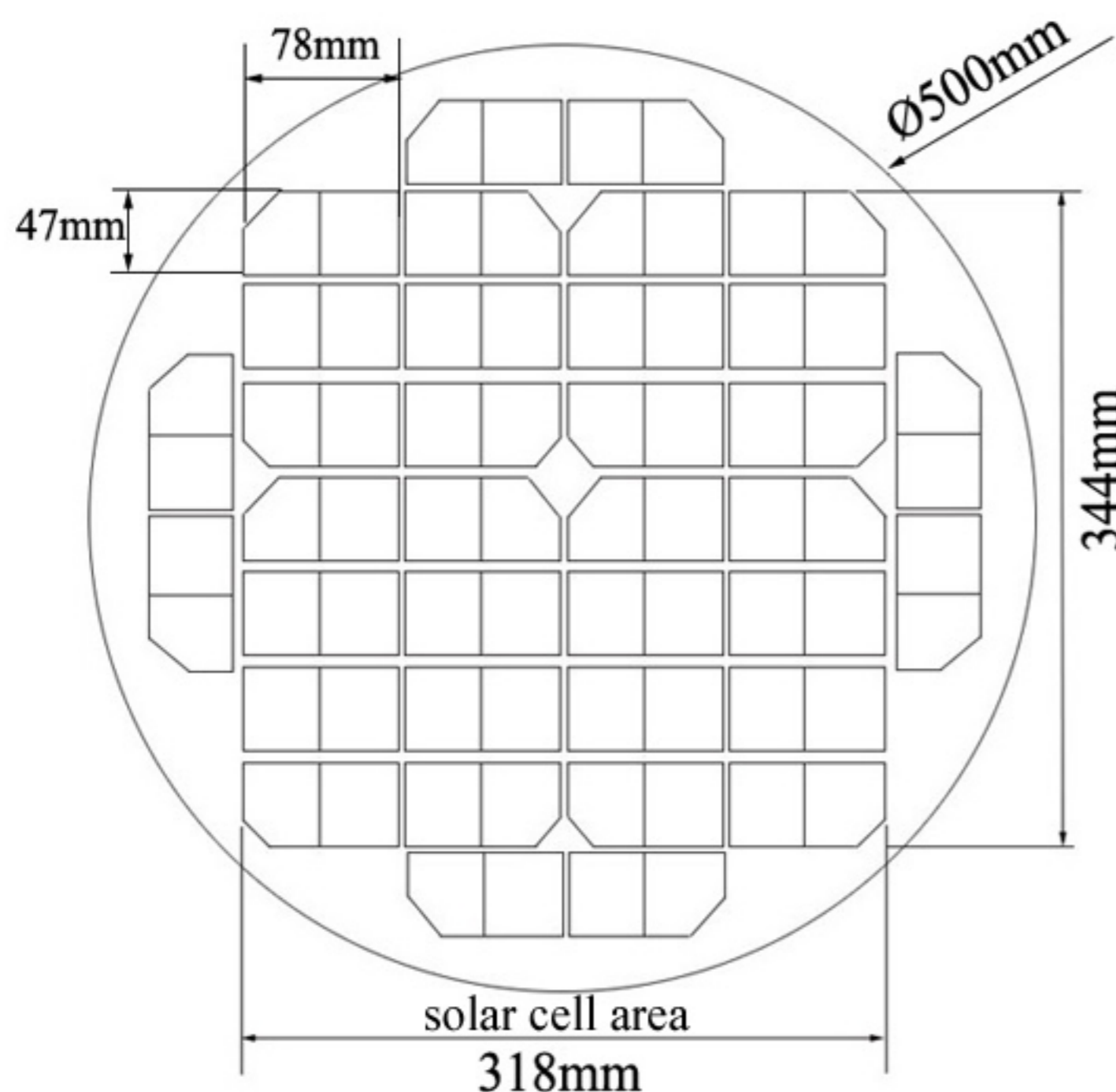
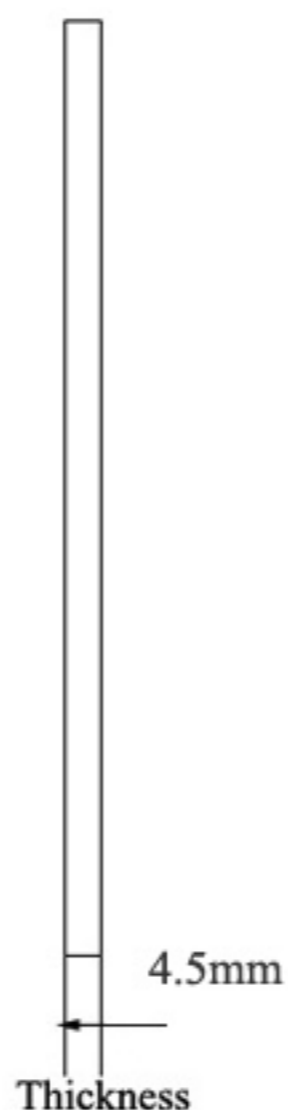


## 20W CIRCULAR SOLAR PANEL



FRONT VIEW



SIDE VIEW



BACK VIEW

### ELECTRICAL CHARACTERISTICS

Power	20W		
Operating Voltage	18V	Open Circuit Voltage	21.6V
Operating Current	1.11A	Short Circuit Current	1.21A
Type of solar cell	Monocrystalline Silicon Solar Cell		
Power Tolerance	±5%		
STC: Irradiance 1000W/m <sup>2</sup> , Module temperature: 25°C, AM=1.5			

### TEMPERATURE COEFFICIENTS

Nominal Operating Cell Temperature (NOCT): 45°C±2°C	
Temp.Coefficient of Isc	(0.045±0.01)%/°C
Temp.Coefficient of Voc	-(0.34±0.01)/°C
Temp.Coefficient of Power	-(0.47±0.05)%/°C

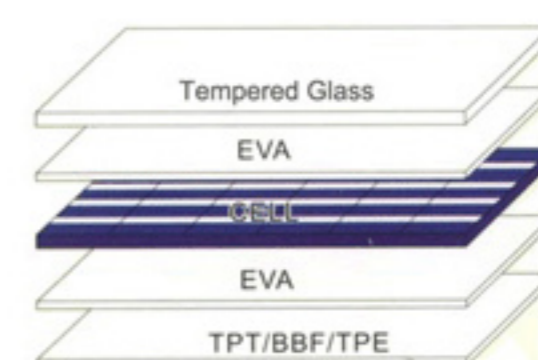
### TESTED OPERATING CONDITIONS

Max load	50psf 245kg/m <sup>2</sup> (2400)pascals
Hailstone impact	25mm(1inch) at 23m/s(52mph)
Operating Temperature	-40° C to + 85° C

### MECHANICAL SPECIFICATIONS

Dimensions	Ø500mm, Thickness:4.5mm
Encapsulation	Glass/EVA/Cells/EVA/TPT
Front Glass	Tempered Glass, thickness: 3.2mm
Frame	Without frame, With junction box
Efficiency	≥18%
Dimension Tolerance ±0.2mm	

### FIGURE OF STRUCTURE



### WARRANTIES

Power output more than 90% for 10years  
Power output more than 80% for 20years

THE TECHNICAL FILES PROVIDED BY CHINA SOLAR LTD

Office Address:  
N0.401,ZhongKang Pioneer Park,ZhongKang Road,  
Futian District, ShenZhen City,Guangdong Province,China  
Factory Address:  
Longxi Hi-tech Industrial Park, Longcheng Road, Longgang  
Town, ShenZhen City,Guangdong Province,China