



## High Voltage Trench Schottky Diode

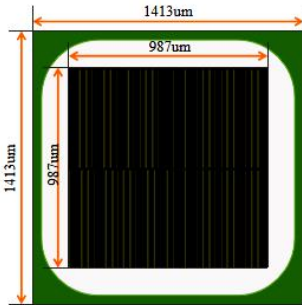
## FEATURES

- Trench MOS Schottky technology
- Die in 6" Wafer Form
- 80V, 5A\*
- $V_F=0.58V(\text{typ.})^{**}$

Electrical Characteristics (T<sub>j</sub>=25°C)

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
V <sub>RRM</sub>	Maximum repetitive peak reverse voltage	80	91	—	V	I <sub>R</sub> =500μA
V <sub>F</sub>	Static Forward Voltage	—	0.42	0.47	V	I <sub>F</sub> =1A
		—	0.50	0.57	V	I <sub>F</sub> = 3A
		—	0.58	0.65	V	I <sub>F</sub> = 5A
I <sub>R</sub> <sup>***</sup>	Cathode-To-Anode Leakage Current	—	5	20	μA	V <sub>R</sub> =80V
T <sub>J</sub> , T <sub>STG</sub>	Operating and Storage Temperature Range	-55°C to 150°C Max				
*** Pulse width < 300 uS, Duty cycle < 2%						

## Mechanical Data

Die Size	1473×1473	μm <sup>2</sup>	<b>CHIP DRAWING</b> (Scribe Line is Excluded) 
Source Pad Size	987×987	μm <sup>2</sup>	
Scribe Line Size	60	μm	
Wafer Diameter	6	in	
Wafer Thickness	250	μm	
Estimated Gross Die	7321(Yield>98%)		
Anode Metal Thickness	AlSiCu(5.5um)		
Cathode Metal Thickness	Ti\Ni\Ag(0.2um\0.3um\2um)		
Recommended Storage Environment	Store in original container, in dry nitrogen, < 6 months at an ambient temperature of 23°C±3°C >		

\* Electrical characteristics are reported for the reference packaged part (TO-220) and can not be guaranteed in die sales form.

\*\* Electrical characteristics are reported for the bare die. Variations in customer packaging materials, dimensions and processes may affect parametric performance.