



## High Voltage Trench Schottky Diode

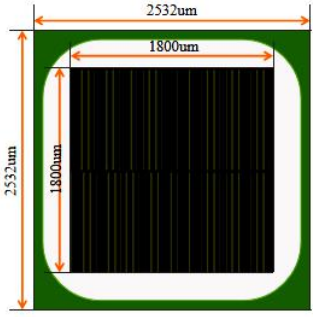
## FEATURES

- Trench MOS Schottky technology
- Die in 6" Wafer Form
- 120V, 10A\*
- $V_F=0.68V(\text{typ.})^{**}$

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	125	135	—	V	I <sub>R</sub> =500μA
V <sub>F</sub>	Static Forward Voltage	—	0.38	0.45	V	I <sub>F</sub> =1A
		—	0.54	0.60	V	I <sub>F</sub> =5A
		—	0.68	0.73	V	I <sub>F</sub> =10A
I <sub>R</sub> <sup>***</sup>	Cathode-To-Anode Leakage Current	—	12	30	μA	V <sub>R</sub> =120V
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	2592×2592	μm <sup>2</sup>	<b>CHIP DRAWING</b> (Scribe Line is Excluded) 
Source Pad Size	1800 × 1800	μm <sup>2</sup>	
Scribe Line Size	60	μm	
Wafer Diameter	6	in	
Wafer Thickness	250	μm	
Estimated Gross Die	2372(Yield>97%)		
Anode Metal Thickness	AlSiCu(5.5μm)		
Cathode Metal Thickness	Ti\Ni\Ag(0.2μm\0.3μm\2μm)		
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.