

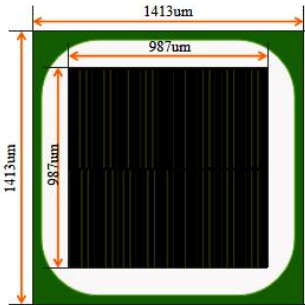
**High Voltage Trench Schottky Diode****FEATURES**

- Trench MOS Schottky technology
- Die in 6" Wafer Form
- 120V, 3A*
- $V_F=0.67V(\text{typ.})^{**}$

Electrical Characteristics ($T_j=25^\circ\text{C}$)

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
V_{RRM}	Maximum repetitive peak reverse voltage	125	137	—	V	$I_R=500\mu\text{A}$
V_F	Static Forward Voltage	—	0.48	0.53	V	$I_F=1\text{A}$
		—	0.58	0.64	V	$I_F=2\text{A}$
		—	0.67	0.73	V	$I_F=3\text{A}$
I_R^{***}	Cathode-to-anode Leakage Current	—	4	30	μA	$V_R=120\text{V}$
T_j, T_{STG}	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^2	CHIP DRAWING (Scribe Line is Excluded) 
Source Pad Size	987×987	μm^2	
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.