High Voltage Trench Schottky Diode

FEATURES

·Trench MOS Schottky technology

·Die in 6" Wafer Form

·100V, 5A*

·V_F=0.66V(typ.)**

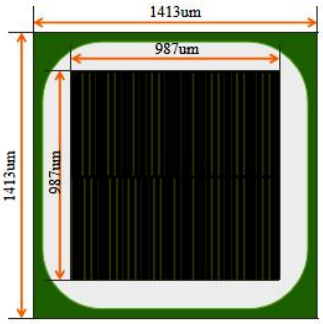
Electrical Characteristics (Tj=25℃)

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
V_{RRM}	Maximum repetitive peak reverse voltage	108	113	—	V	I_R=500μA
V_F	Static Forward Voltage	—	0.44	0.48	V	I_F=1A
		—	0.57	0.65	V	I_F = 3A
		—	0.66	0.73	V	I_F = 5A
I_R***	Cathode-To-Anode Leakage Current	—	6	20	μA	V_R=100V
T_J, T_{STG}	Operating and Storage Temperature Range	-55℃ to 150℃ Max				
*** Pulse width < 300 uS, Duty cycle < 2%						

Mechanical Data

Die Size	1473×1473	μm²
Source Pad Size	987×987	μm²
Scribe Line Size	60	μm
Wafer Diameter	6	in
Wafer Thickness	250	μm
Estimated Gross Die	7321（Yield>98%）	
Anode Metal Thickness	Al\Ti\Ni\Ag(2.8um\0.1um\0.2um\1.8um)	
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℃±3℃ >	

CHIP DRAWING
(Scribe Line is Excluded)



* 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.