High Voltage Trench Schottky Diode

FEATURES

·Trench MOS Schottky technology

·Die in 6" Wafer Form

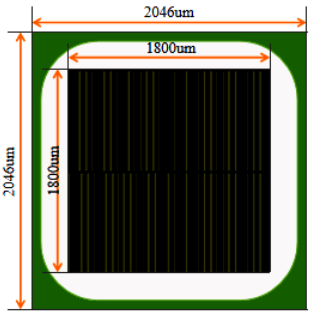
·100V, 10A*

·V_F=0.63V(typ.)**

Electrical Characteristics (Tj=25℃)

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
V_{RRM}	Maximum repetitive peak reverse voltage	105	113	—	V	I_R =500μA
V_F	Static Forward Voltage	—	0.38	0.49	V	I_F = 1A
		—	0.51	0.55	V	I_F = 5A
		—	0.63	0.75	V	I_F = 10A
I_R***	Cathode-to-anode Leakage Current	—	18	50	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	2106×2106	μm²	**CHIP DRAWING** (Scribe Line is Excluded)
Source Pad Size	1800 × 1800	μm²	
Scribe Line Size	60	μm	
Wafer Diameter	6	in	
Wafer Thickness	250	μm	
Estimated Gross Die	3611(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℃ >		

* 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.