

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

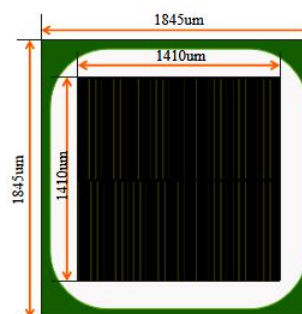
- Trench MOS Schottky technology
- Die in 6" Wafer Form
- 100V, 5A\*
- $V_F=0.58V(\text{typ.})^{**}$

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

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
$V_{RRM}$	Maximum repetitive peak reverse voltage	105	117	—	V	$I_R=500\mu\text{A}$
$V_F$	Static Forward Voltage	—	0.41	0.49	V	$I_F=1\text{A}$
		—	0.50	0.56	V	$I_F=3\text{A}$
		—	0.58	0.64	V	$I_F=5\text{A}$
$I_R^{***}$	Cathode-To-Anode Leakage Current	—	7	30	$\mu\text{A}$	$V_R=100\text{V}$
$T_j, T_{STG}$	Operating and Storage Temperature Range	-55°C to 150°C Max				
*** Pulse width < 300 uS, Duty cycle < 2%						

**Mechanical Data**

Die Size	1905×1905	$\mu\text{m}^2$	<b>CHIP DRAWING</b> (Scribe Line is Excluded)
Source Pad Size	1410×1410	$\mu\text{m}^2$	
Scribe Line Size	60	$\mu\text{m}$	
Wafer Diameter	6	in	
Wafer Thickness	250	$\mu\text{m}$	
Estimated Gross Die	4387(Yield>98%)		
Anode Metal Thickness	AlSiCu(5.5 $\mu\text{m}$ )		
Cathode Metal Thickness	Ti\Ni\Ag(0.2 $\mu\text{m}$ \0.3 $\mu\text{m}$ \2 $\mu\text{m}$ )		
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.