



High Voltage Trench Schottky Diode

FEATURES

- Trench MOS Schottky technology
- Die in 6" Wafer Form
- 80V, 5A*
- $V_F=0.58V(\text{typ.})^{**}$

Electrical Characteristics (T_j=25°C)

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
V _{RRM}	Maximum repetitive peak reverse voltage	80	91	—	V	I _R = 500μA
V _F	Static Forward Voltage	—	0.42	0.47	V	I _F = 1A
		—	0.51	0.57	V	I _F = 3A
		—	0.58	0.65	V	I _F = 5A
I _R ***	Cathode-To-Anode Leakage Current	—	5	30	μA	V _R = 80V
T _J , T _{STG}	Operating and Storage Temperature Range	-55°C to 150°C Max				
*** Pulse width < 300 uS, Duty cycle < 2%						

Mechanical Data

Parameter	Value	Unit	CHIP DRAWING (Scribe Line is Excluded)
Die Size	1473×1473	μm ²	
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	AlTi\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°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.