



High Voltage Trench Schottky Diode

FEATURES

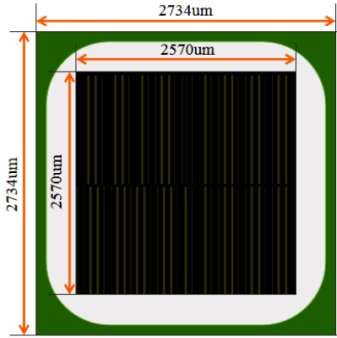
- Trench MOS Schottky technology
- Die in 6" Wafer Form
- 45V, 15A*
- $V_F=0.52V$ (typ.)**

Electrical Characteristics (T_j=25°C)

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
V _{RRM}	Maximum repetitive peak reverse voltage	45	—	—	V	I _R = 500μA
V _F	Static Drain-Source On-Resistance	—	0.36	0.40	V	I _F = 1A
		—	0.48	0.52	V	I _F = 10A
		—	0.52	0.58	V	I _F = 15A
I _R ***	Cathode-to-anode Leakage Current	—	10	30	μA	V _R = 45V
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	2794×2794	μm ²	CHIP DRAWING (Scribe Line is Excluded) 
Source Pad Size	2570 × 2570	μm ²	
Scribe Line Size	60	μm	
Wafer Diameter	6	in	
Wafer Thickness	250	μm	
Estimated Gross Die	1990(Yield > 97%)		
Anode Metal Thickness	Al (5.5μm)		
Cathode Metal Thickness	Ti\Ni\Ag (0.2μm\0.3μm\2μm)		
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.