



High Voltage Trench Schottky Diode

FEATURES

- Trench MOS Schottky technology
- Die in 6" Wafer Form
- 60V, 15A*
- $V_F=0.55V$ (typ.)***

Electrical Characteristics (T_j=25°C)

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
V_{RRM}	Maximum repetitive peak reverse voltage	60	—	—	V	$I_R = 500\mu A$
V_F	Static Forward Voltage	—	0.37	0.42	V	$I_F = 1A$
		—	0.51	0.55	V	$I_F = 10A$
		—	0.56	0.60	V	$I_F = 15A$
I_R^{***}	Cathode-to-anode Leakage Current	—	10	30	μA	$V_R = 60V$
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\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°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.