



TSB82T100S(A)S-255C

10A/100V⁽¹⁾, low VF Schottky barrier diode with trench MOS structure

Mechanical Data

Chip Drawing	Item	Information	
	Die Size (A)	2082 μm	82 mil
	Top Metal Pad Size (B)	1950 μm	77mil
	Chip Size (C)	2002 μm	79mil
	Wafer Thickness (D)	255 μm	9.5 mil
	Scribe Line Width (E)	80 μm	3.15 mil
	Wafer Size	6 inch	
	Top Side Metallization	Al/Ag	
	Back Side Metallization	Ti Ni Ag	
	Recommended Storage Environment	Stored in original container, in dry nitrogen, (6 months at an ambient temperature of 23 $^{\circ}\text{C}\pm 3^{\circ}\text{C}$)	

Electrical Characteristics (T_J=25 $^{\circ}\text{C}$, unless otherwise specified)⁽²⁾

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
V _{BR}	Reverse Breakdown Voltage	105	109	-	V	I _R = 100 μA
V _F	Instantaneous Forward Voltage	-	0.53	0.59	V	I _F = 5A ⁽³⁾
		-	0.65	0.70	V	I _F = 10A ⁽³⁾
I _R	Reverse Leakage Current	-	15	50	μA	V _R = 105V
T _J , T _{STG}	Operating and Storage Temperature	-40 $^{\circ}\text{C}$ to 150 $^{\circ}\text{C}$ Max				

Note:

(1) The preliminary wafer datasheet only for reference;

(2) This characteristics assume the dies are assembled in SMC packages. Actual performance may degrade when assembled. YJ does not guarantee device performance after assembly;

(3) Pulse Width tp = < 300 μs , Duty Cycle <2%;