



# TSB82T100S(A)S-255A

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

### Mechanical Data

Chip Drawing	Item	Information	
	Die Size (A)	2082 $\mu\text{m}$	82 mil
	Top Metal Pad Size (B)	1950 $\mu\text{m}$	77 mil
	Chip Size (C)	2002 $\mu\text{m}$	79 mil
	Wafer Thickness (D)	255 $\mu\text{m}$	9.5 mil
	Scribe Line Width (E)	80 $\mu\text{m}$	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°C $\pm$ 3°C)	

### Electrical Characteristics (T<sub>J</sub>=25°C, unless otherwise specified)<sup>(2)</sup>

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
V <sub>BR</sub>	Reverse Breakdown Voltage	105	109	-	V	I <sub>R</sub> = 100 $\mu\text{A}$
V <sub>F</sub>	Instantaneous Forward Voltage	-	0.53	0.59	V	I <sub>F</sub> = 5A <sup>(3)</sup>
		-	0.67	0.70	V	I <sub>F</sub> = 10A <sup>(3)</sup>
I <sub>R</sub>	Reverse Leakage Current	-	22	50	$\mu\text{A}$	V <sub>R</sub> = 105V
T <sub>J</sub> , T <sub>STG</sub>	Operating and Storage Temperature	-40°C to 150°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 t<sub>p</sub> = < 300  $\mu\text{s}$ , Duty Cycle < 2%;