



# TSB150T045S(A)S-310A

## 30A/45V<sup>(1)</sup>, low VF Schottky barrier diode with trench MOS structure

### Mechanical Data

Chip Drawing	Item	Information	
	Die Size (A)	3810 μm	150 mil
	Top Metal Pad Size (B)	3678μm	145mil
	Chip Size (C)	3730μm	147mil
	Wafer Thickness (D)	310 μm	11.4 mil
	Scribe Line Width (E)	80 μm	3.15 mil
	Wafer Size	6 inch	
	Top Side Metallization	TSBF0T045SS-310A	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±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	48	53	-	V	I <sub>R</sub> =100μA
V <sub>F</sub>	Instantaneous Forward Voltage	-	0.49	0.52	V	I <sub>F</sub> =30A <sup>(3)</sup>
I <sub>R</sub>	Reverse Leakage Current	-	13	50	A	V <sub>R</sub> =45V
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 assumes the dies are assembled in R-6 packages. Actual performance may degrade when assembled. YJ does not guarantee device performance after assembly;

(3)