



# TSB32T040S(A)S-255A

## 1A/40V<sup>(1)</sup>, low VF Schottky barrier diode with trench MOS structure

### Mechanical Data

Chip Drawing	Item	Information	
	Die Size (A)	813μm	32mil
	Top Metal Pad Size (B)	693μm	27mil
	Chip Size (C)	707μm	28mil
	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°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	52	-	V	I <sub>R</sub> =100μA
V <sub>F</sub>	Instantaneous Forward Voltage	-	0.37	0.45	V	I <sub>F</sub> =1A <sup>(3)</sup>
I <sub>R</sub>	Reverse Leakage Current	-	30	100	μA	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 DO-27 packages. Actual performance may degrade when assembled. YJ does not guarantee device performance after assembly;

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