



# TSB75T100S(A)S-255B

## 5A/100V, low VF Schottky barrier diode with trench MOS structure

### Mechanical Data

Chip Drawing	Item	Information	
	Die Size (A)	1905 $\mu\text{m}$	75 mil
	Top Metal Pad Size (B)	1812 $\mu\text{m}$	71mil
	Chip Size (C)	1825 $\mu\text{m}$	72mil
	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 ( $T_J=25^\circ\text{C}$ , unless otherwise specified)<sup>(1)</sup>

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
$V_{BR}$	Reverse Breakdown Voltage	105	110	-	V	$I_R = 100\mu\text{A}$
$V_F$	Instantaneous Forward Voltage	-	0.55	0.58	V	$I_F = 5\text{A}^{(3)}$
$I_R$	Reverse Leakage Current	-	10	40	$\mu\text{A}$	$V_R = 105\text{V}$
$T_J, T_{STG}$	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 SMB packages. Actual performance may degrade when assembled. YJ does not guarantee device performance after assembly;
- (3) Pulse Width  $t_p = < 300\mu\text{s}$ , Duty Cycle  $< 2\%$ ;