TSB180T045S(A)S-310A

40A/45V(1), low VF Schottky barrier diode with trench MOS structure

Mechanical Data

Chip Drawing	Item	Information	
	Die Size (A)	4572μm	180mil
	Top Metal Pad Size (B)	4361μm	172mil
	Chip Size (C)	4440μm	175mil
	Wafer Thickness (D)	310 μm	11.4 mil
	Scribe Line Width (E)	80 μm	3.15 mil
	Wafer Size	6 inch	
	Top Side Metallization	TSBI0T045AS-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℃±3℃)	

Electrical Characteristics (T_J=25℃, unless otherwise specified) (2)

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
V_{BR}	Reverse Breakdown Voltage	48	52	-	V	I_R =100μA
V_F	Instantaneous Forward Voltage	-	0.47	0.50	V	I_F =40A(3)
I_R	Reverse Leakage Current	-	30	55	μA	V_R =45V
T_J, T_{STG}	Operating and Storage Temperature	-40℃ to 150℃ 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) Pulse Width tp = < 300μS, Duty Cycle <2%;