



TSB130T045S(A)S-310A

20A/45V⁽¹⁾, low VF Schottky barrier diode with trench MOS structure

Mechanical Data

Chip Drawing	Item	Information	
	Die Size (A)	3302 μ m	130 mil
	Top Metal Pad Size (B)	3223 μ m	127mil
	Chip Size (C)	3251 μ m	128mil
	Wafer Thickness (D)	310 μ m	11.4 mil
	Scribe Line Width (E)	80 μ 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 $^{\circ}$ C \pm 3 $^{\circ}$ C)	

Electrical Characteristics (T_J=25 $^{\circ}$ C, unless otherwise specified)⁽²⁾

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
V _{BR}	Reverse Breakdown Voltage	48	53	-	V	I _R =100 μ A
V _F	Instantaneous Forward Voltage	-	0.47	0.50	V	I _F =20A ⁽³⁾
I _R	Reverse Leakage Current	-	13	40	μ A	V _R =45V
T _J , T _{STG}	Operating and Storage Temperature	-40 $^{\circ}$ C to 150 $^{\circ}$ 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) Pulse Width tp = < 300 μ S, Duty Cycle <2%;