



# PMB087T045SS-255A

## 5A/45V<sup>(1)</sup>, low VF Planar MOS barrier diode

### Mechanical Data

Chip Drawing	Item	Information	
	Die Size (A)	2210μm	87.0 mil
	Top Metal Pad Size (B)	2090μm	82.3mil
	Chip Size (C)	/	/
	Wafer Thickness (D)	255 μm	10.0 mil
	Scribe Line Width (E)	80 μm	3.15 mil
	Wafer Size	6 inch	
	Top Side Metallization	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	50	53	-	V	I <sub>R</sub> =300μA
V <sub>F</sub>	Instantaneous Forward Voltage	-	0.40	0.45	V	I <sub>F</sub> =5A <sup>(3)</sup>
I <sub>R</sub>	Reverse Leakage Current	-	70	150	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 TO-220 packages. Actual performance may degrade when assembled. YJ does not guarantee device performance after assembly;
- (3) Pulse Width t<sub>p</sub> = < 300μS, Duty Cycle <2%;