# Schottky Barrier Diode

RB160MM-50 Data Sheet

#### Application

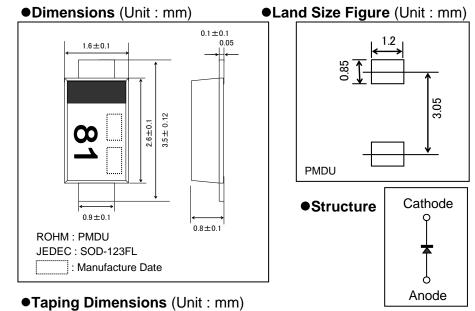
General rectification

#### Features

- Small power mold type (PMDU)
- 2) High reliability
- 3) Low V<sub>F</sub>

#### Construction

Silicon epitaxial planar type



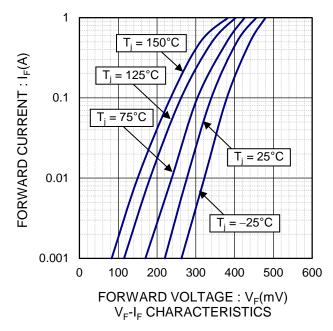
#### ● Absolute Maximum Ratings (T<sub>c</sub>= 25°C)

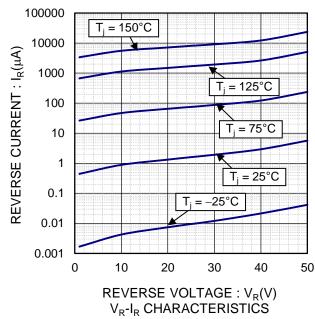
Parameter	Symbol	Conditions	Limits	Unit
Repetitive Peak Reverse Voltage	$V_{RM}$	Duty≦0.5	50	V
Reverse Voltage	$V_R$	Direct Reverse Voltage	40	V
Average Forward Rectified Current	I <sub>o</sub>	Glass epoxi mounted, 60Hz half sin Wave resistive load	1	Α
Non-repetitive Forward Current Surge Peak	I <sub>FSM</sub>	60Hz half sin wave ,Non-repetitive at $T_a$ =25°C	30	Α
Operating Junction Temperature	T <sub>j</sub>	-	150	°C
Storage Temperature	T <sub>stg</sub>	-	-40 to +150	°C

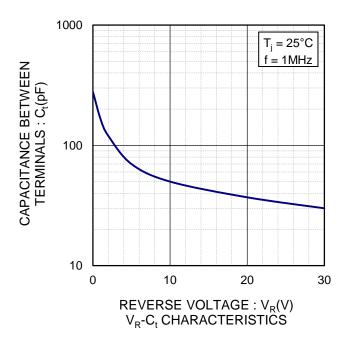
## •Electrical Characteristics $(T_j = 25^{\circ}C)$

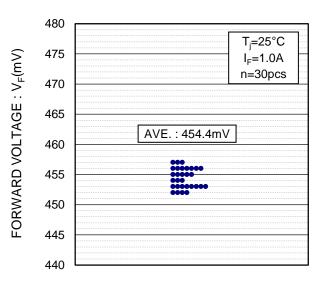
Parameter	Symbol	Conditions	Min.	Тур.	Max.	Unit
Forward Voltage	$V_{F}$	I <sub>F</sub> =1.0A	-	0.46	0.51	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =40V	-	4.0	30	μА

#### • Electrical Characteristic Curves



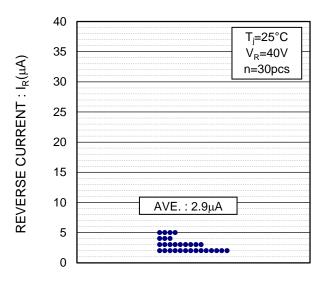


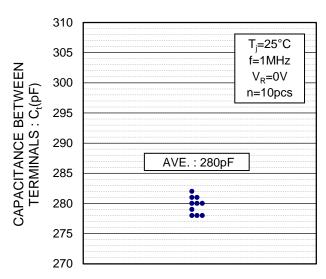




V<sub>F</sub> DISPERSION MAP

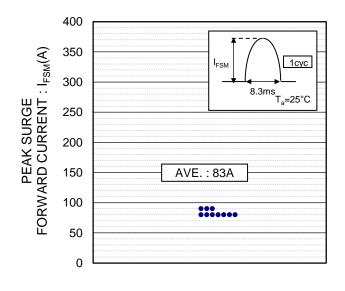
#### **•**Electrical Characteristic Curves



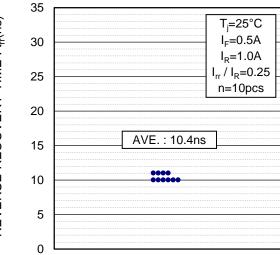


I<sub>R</sub> DISPERSION MAP

C<sub>t</sub> DISPERSION MAP



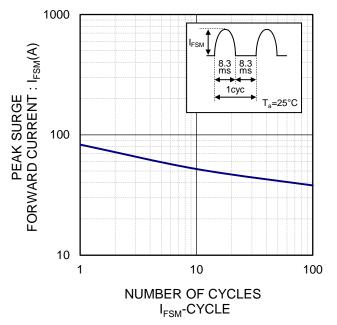
REVERSE RECOVERY TIME : t<sub>rr</sub>(ns)

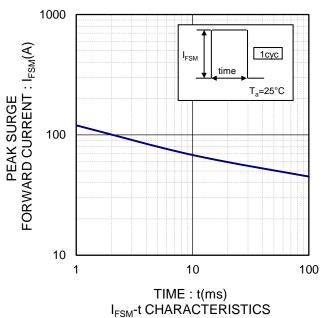


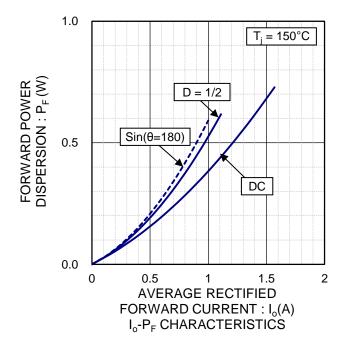
I<sub>FSM</sub> DISPERSION MAP

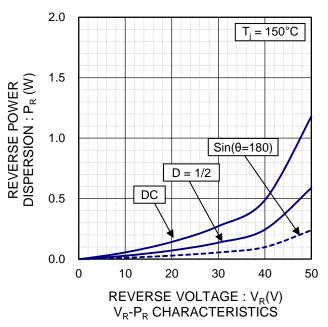
t<sub>rr</sub> DISPERSION MAP

#### **•**Electrical Characteristic Curves

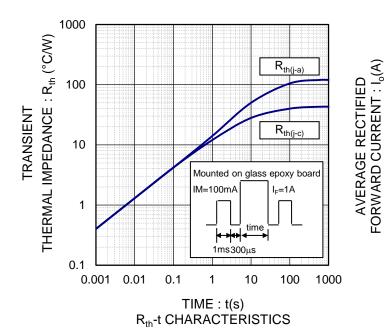


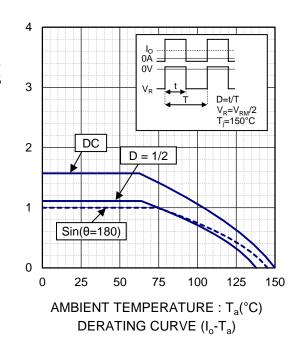


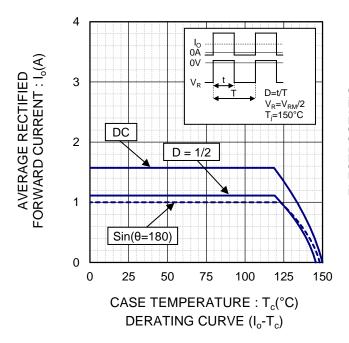


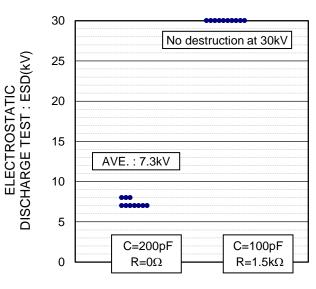


#### **•**Electrical Characteristic Curves









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