# Schottky barrier diode RB201A60

# Applications

General rectification

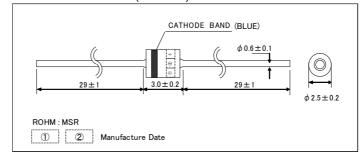
### ● Features

- 1) Cylindrical mold type.(MSR)
- 2) Low  $V_F$ .
- 3) High ESD.

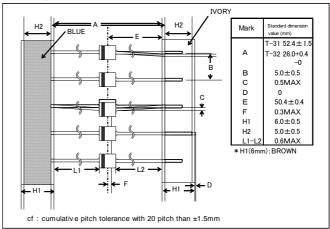
#### Construction

Silicon epitaxial planar

# • External dimensions (Unit : mm)



### • Taping specifications (Unit : mm)



## ● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	60	V
Reverse voltage (DC)	$V_R$	60	V
Average rectified forward current (*1)	lo	2	Α
Forward current surge peak (t=100µs)	I <sub>FSM</sub>	40	Α
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

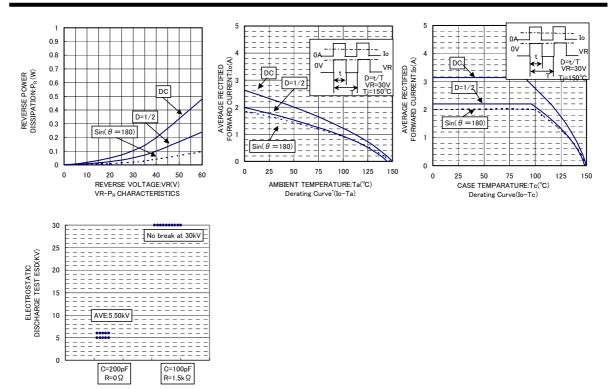
<sup>(\*1)</sup> Mounted on epoxy board. 180°Half sine wave

### ●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Forward voltage	$V_{F}$	-	-	0.58	V	I <sub>F</sub> =2.0A
Reverse current	$I_R$	-	-	100	μA	$V_R=60V$

#### ●Electrical characteristic curves (Ta=25°C) 100000 1000 10000 FORWARD CURRENT:IF(mA) 1 00 CAPACITANCE BETWEEN TERMINALS:Ct(pF) REVERSE CURRENT:IR(uA) 1000 100 10 0.1 0.1 0.01 15 20 25 5 10 15 20 REVERSE VOLTAGE:VR(V) 10 0 0 30 FORWARD VOLTAGE: VF(mV) REVERSE VOLTAGE: VR(V) VF-IF CHARACTERISTICS VR-IR CHARACTERISTICS VR-Ct CHARACTERISTICS 400 Ta=25°C IF=2A n=30pcs Ta=25°C FORWARD VOLTAGE:VF(mV) 360 80 REVERSE CURRENT:IR(uA) CAPACITANCE BETWEEN 340 340 320 300 280 260 70 60 540 50 AVE:316.3pF 530 30 240 20 520 200 510 IR DISPERSION MAP Ct DISPERSION MAP 100 Ta=25°C IF=0.5A IR=1A RESERVE RECOVERY TIME:trr(ns) 250 PEAK SURGE FORWARD CURRENT:IFSM(A) FORWARD CURRENT:IFSM(A) 80 rr=0.25\*IF 200 20 PEAK SURGE 60 50 150 15 AVE:66.0A 40 100 10 30 50 AVE:9.5ns 10 0 10 NUMBER OF CYCLES IFSM-CYCLE CHARACTERISTICS trr DISPERSION MAP IFSM DISRESION MAP 150 10000 PEAK SURGE FORWARD CURRENT:IFSM(A) 9000 100 THAERMAL IMPEDANCE:Rth 0 0 $Sin(\theta = 180)$ FORWARD POWER DISSIPATION:Pf(W) TRANSIENT 50 0.1 I TIME:t(s) 100 1000 10 TIME:t(ms) AVERAGE RECTIFIED FORWARD CURRENT:Io(A) Io-Pf CHARACTERISTICS IFSM-t CHARACTERISTICS Rth-t CHARACTERISTICS

ESD DISPERSION MAP



#### Notes

- No technical content pages of this document may be reproduced in any form or transmitted by any
  means without prior permission of ROHM CO.,LTD.
- The contents described herein are subject to change without notice. The specifications for the
  product described in this document are for reference only. Upon actual use, therefore, please request
  that specifications to be separately delivered.
- Application circuit diagrams and circuit constants contained herein are shown as examples of standard use and operation. Please pay careful attention to the peripheral conditions when designing circuits and deciding upon circuit constants in the set.
- Any data, including, but not limited to application circuit diagrams information, described herein are intended only as illustrations of such devices and not as the specifications for such devices. ROHM CO.,LTD. disclaims any warranty that any use of such devices shall be free from infringement of any third party's intellectual property rights or other proprietary rights, and further, assumes no liability of whatsoever nature in the event of any such infringement, or arising from or connected with or related to the use of such devices.
- Upon the sale of any such devices, other than for buyer's right to use such devices itself, resell or
  otherwise dispose of the same, no express or implied right or license to practice or commercially
  exploit any intellectual property rights or other proprietary rights owned or controlled by
- ROHM CO., LTD. is granted to any such buyer.
- Products listed in this document are no antiradiation design.

The products listed in this document are designed to be used with ordinary electronic equipment or devices (such as audio visual equipment, office-automation equipment, communications devices, electrical appliances and electronic toys).

Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

#### About Export Control Order in Japan

Products described herein are the objects of controlled goods in Annex 1 (Item 16) of Export Trade Control Order in Japan.

In case of export from Japan, please confirm if it applies to "objective" criteria or an "informed" (by MITI clause) on the basis of "catch all controls for Non-Proliferation of Weapons of Mass Destruction.

