ROHM	PRODUCTS	TYPE		PAGE				
SEMICONDUCTOR	DIODE	R B 5 2 1	SM-40	1/2				
1. PRODUCT	Schottky Barrier D	Schottky Barrier Diode (Silicon Epitaxial Planer)						
2. TYPE	R B 5 2 1 S M – 4	R B 5 2 1 S M – 4 0						
3. APPLICATIO	N Small current rect	Small current rectification						
4. FEATURE	•Ultra small mold <sup>.</sup> •High reliability	·Ultra small mold type (EMD2) ·High reliability						
<ul> <li>5. ABSOLUTE MAXIMUM RATING (Ta=25°C) Reverse voltage(repetitive peak)</li> <li>VRM</li> <li>Reverse voltage(DC)</li> <li>Average rectified forward current</li> <li>Forward current surge peak (t=1ms·1cyc.)</li> <li>I FSM</li> <li>I FSM</li> <li>I for temperature</li> <li>Storage temperature</li> <li>T stg</li> <li>-55~</li> </ul>								

6. ELECTRICAL CHARACTERISTIC (Ta= $25^{\circ}C$ )

Characteristic	Symbol	Test condition		Standard					
				MIN.		TYP.		MAX.	
Forward voltage	VF	IF=	10 mA	0.16	٧	0.26	٧	0. 30	۷
		IF=	100 mA	0.31	۷	0.395	۷	0.45	۷
		IF=	200 mA	0. 41	۷	0. 495	۷	0. 54	۷
Reverse current	I R	VR=	10 V	-		3.5	μA	20 µ	ιΑ
		VR=	40 V	-		13	μA	90 μ	ιΑ

7. DIMENSION (UNIT:mm)





8. Marking



TYPE

## Attention in use

Compared with PN junction diodes, Shottkey Barrier Diode generally have higher IR (Reverse leakage current). So that the reverse loss of the diode will increase as temperature increase causing heat up and resulting further increase of IR. This phenomenon will be cause of over heat destruction of the diode. This product is low VF(Forward voltage) type diode and have higher IR compared with the other diodes, because VF and IR characteristics are contrary to each other. Therefore please give consideration to the reverse loss and around temperature when using this product.

## ROHM Co., Ltd. REV. : A