

# Schottky barrier diode

## RB425D / RB421D

●Applications

Low power rectification

●Features

- 1) Small surface mounting type. (SMD3)
- 2) High reliability.
- 3) Low reverse current and low forward voltage.

●Construction

Silicon epitaxial planar

●Marking

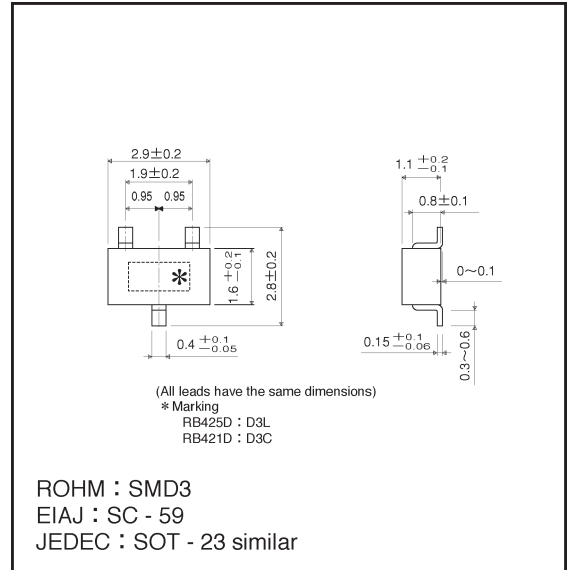
RB425D	
RB421D	

●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	20	V
DC reverse voltage	$V_R$	10	V
Mean rectifying current	$I_o$	0.1	A
Peak forward surge current*	$I_{FSM}$	1	A
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-40~+125	°C

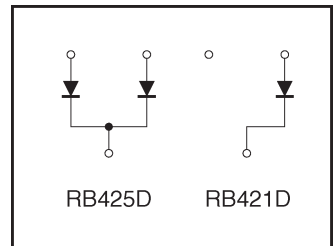
\*60 Hz for 1  $\sim$

●External dimensions (Units: mm)



ROHM : SMD3  
 EIAJ : SC - 59  
 JEDEC : SOT - 23 similar

●Equivalent circuits



●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V <sub>F1</sub>	—	0.45	0.55	V	I <sub>F</sub> =100mA
Forward voltage	V <sub>F2</sub>	—	0.28	0.34	V	I <sub>F</sub> =10mA
Reverse current	I <sub>R</sub>	—	1.0	30	μA	V <sub>R</sub> =10V
Capacitance between terminals	C <sub>T</sub>	—	6.0	—	pF	V <sub>R</sub> =10V, f=1MHz

\*ESD sensitive product handling required.

●Electrical characteristic curves (Ta = 25°C unless specified otherwise)

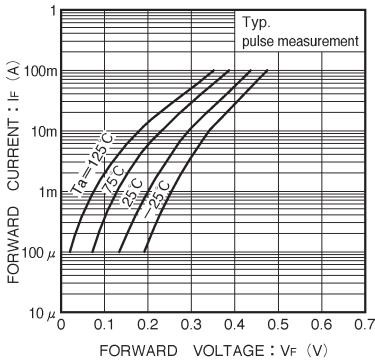


Fig. 1 Forward characteristics

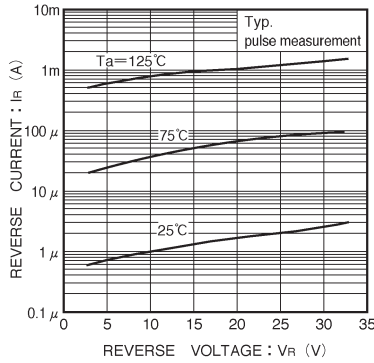


Fig. 2 Reverse characteristics

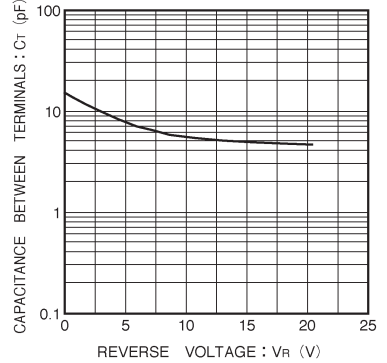


Fig. 3 Capacitance between terminals characteristics

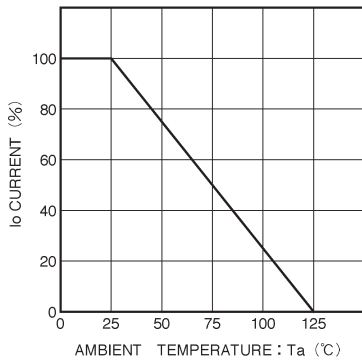


Fig. 4 Derating curve (mounting on glass epoxy PCBs)