Schottky barrier diode

RB500V-40

●Applications

Low current rectification

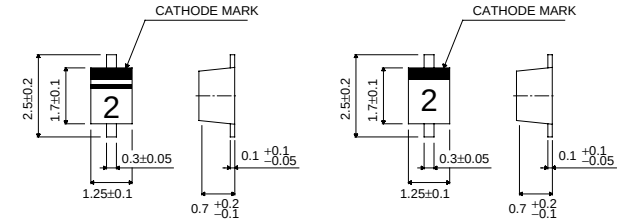
●Features

1) Small surface mounting type. (UMD2)
2) Low I_R. (I_R=70nA Typ.)
3) High reliability.

●Construction

Silicon epitaxial planar

●External dimensions (Units : mm)



ROHM : UMD2
EIAJ : SC-76
JEDEC : SOD-323

∗There are two different markings.

●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	45	V
DC reverse voltage	V_R	40	V
Mean rectifying current	I_O	0.1	A
Peak forward surge current*	I_{FSM}	1	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–40~+125	°C

∗ 60Hz for 1 cycle

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	–	–	0.45	V	I_F=10mA
Reverse current	I_R	–	–	1	μA	V_R=10V
Capacitance between terminals	C_T	–	6.0	–	pF	V_R=10V, f=1MHz

Note) ESD sensitive product handling required.

●**Electrical characteristic curves** (Ta = 25°C)

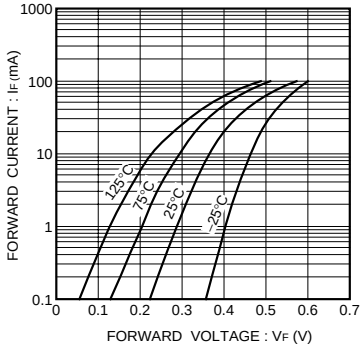


Fig. 1 Forward characteristics

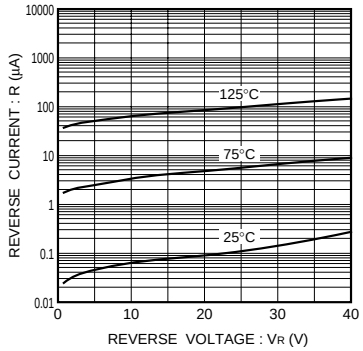


Fig. 2 Reverse characteristics

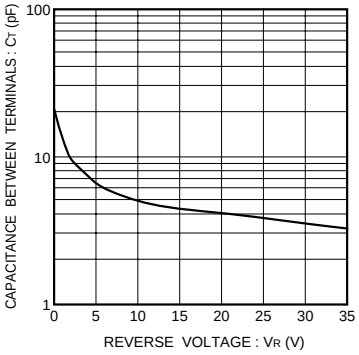


Fig. 3 Capacitance between terminals characteristics

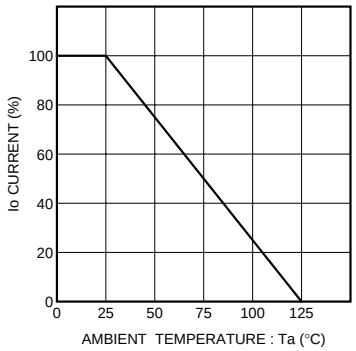


Fig. 4 Derating curve
(mounting on glass epoxy PCBs)