

# Shottky barrier diode

## RB480K

### ●Applications

Low current rectification

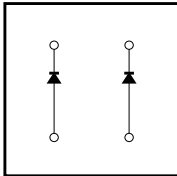
### ●Features

- 1) Small surface mounting (UMD4)
- 2) Low  $I_R$ .  
( $I_R=0.3\mu A$  Typ.)
- 3) This is a composite component and is ideal for reducing the number of components used.
- 4) High reliability.

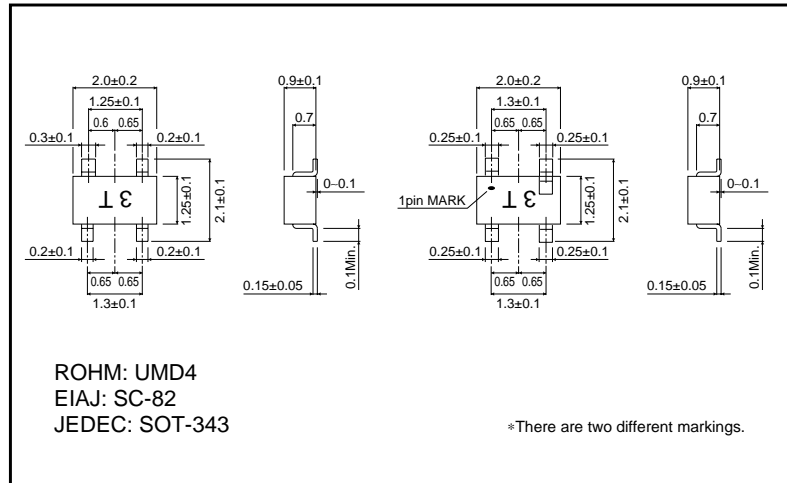
### ●Construction

Silicon epitaxial planar

### ●Circuit



### ●External dimensions (Units : mm)



### ●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	$T_J$	125	°C
Storage temperature	$T_{stg}$	-40~+125	°C

\*60Hz for 1  $\mu s$

Diodes

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V <sub>F1</sub>	–	–	0.45	V	I <sub>F</sub> =10mA
	V <sub>F2</sub>	–	–	0.60	V	I <sub>F</sub> =100mA
Reverse current	I <sub>R1</sub>	–	–	1	μA	V <sub>R</sub> =10V
	I <sub>R2</sub>	–	–	5	μA	V <sub>R</sub> =40V
Capacitance between terminals	C <sub>t1</sub>	–	6.0	–	pF	V <sub>R</sub> =10V, f=1MHz
	C <sub>t2</sub>	–	–	25	pF	V <sub>R</sub> =0V

●Electrical characteristic curves (Ta=25°C)

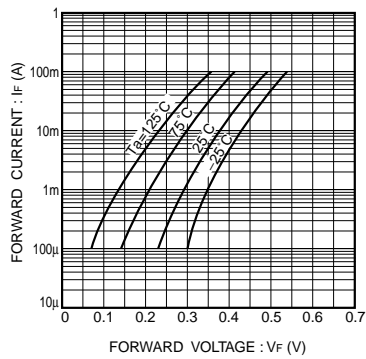


Fig.1 Forward temperature characteristics

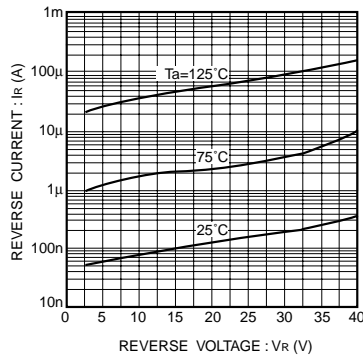


Fig.2 Reverse temperature characteristics

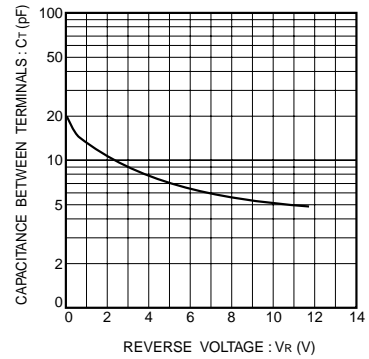


Fig.3 Capacitance between terminals characteristics

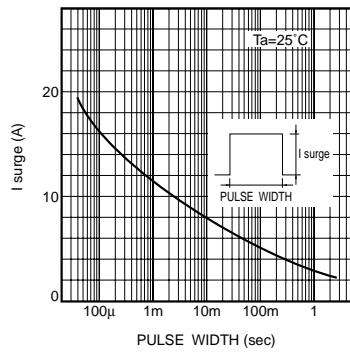


Fig.4 Surge current characteristics