# D1FJ8

## Schottky Barrier Diodes

## 80V, 2A

### Feature

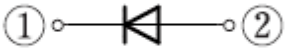
- Small SMD
- High Recovery Speed
- Available for automotive use
- Pb free terminal
- RoHS:Yes

### OUTLINE

**Package (House Name):** 1F
**Package (JEDEC Code):** DO-214AC



### Equivalent circuit




### Absolute Maximum Ratings (unless otherwise specified : Tl=25°C)

| Item | Symbol | Conditions | Ratings | Unit |
|---|---|---|---|---|
| Storage temperrature | Tstg | | -55 to 150 | ℃ |
| Junction temperature | Tj | | 150 | ℃ |
| Repetitive peak reverse voltage | $V_{RRM}$ | | 80 | V |
| Average forward current | $I_F$(AV) | 50Hz sine wave, Resistance load, Tc=110°C | 2 | A |
| Average forward current | $I_F$(AV) | 50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※ | 1.7 | A |
| Surge forward current | $I_{FSM}$ | 50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C | 30 | A |

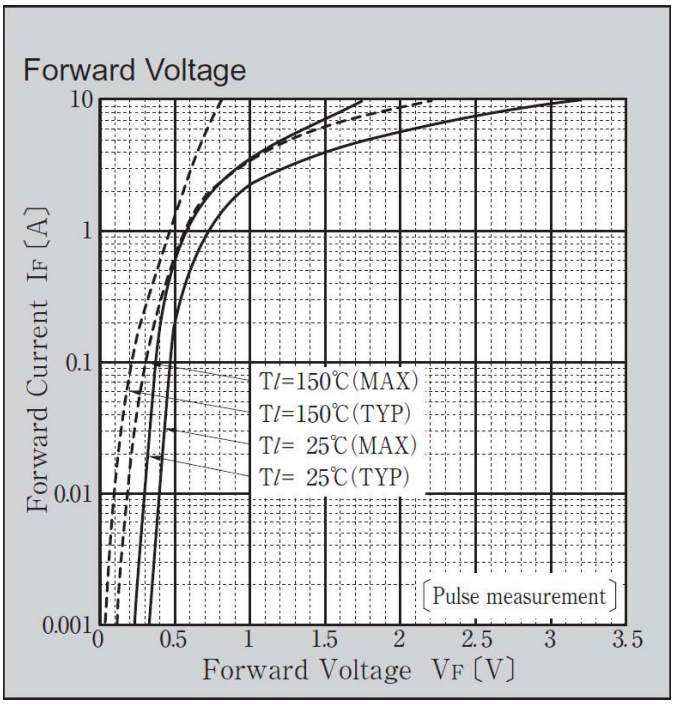
※ ：See the original Specifications

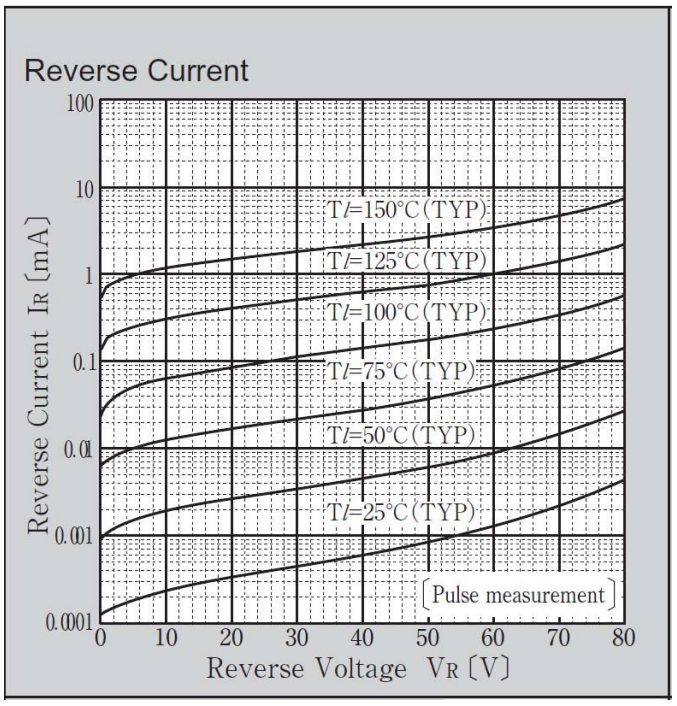
## Electrical Characteristics (unless otherwise specified : Tl=25°C)

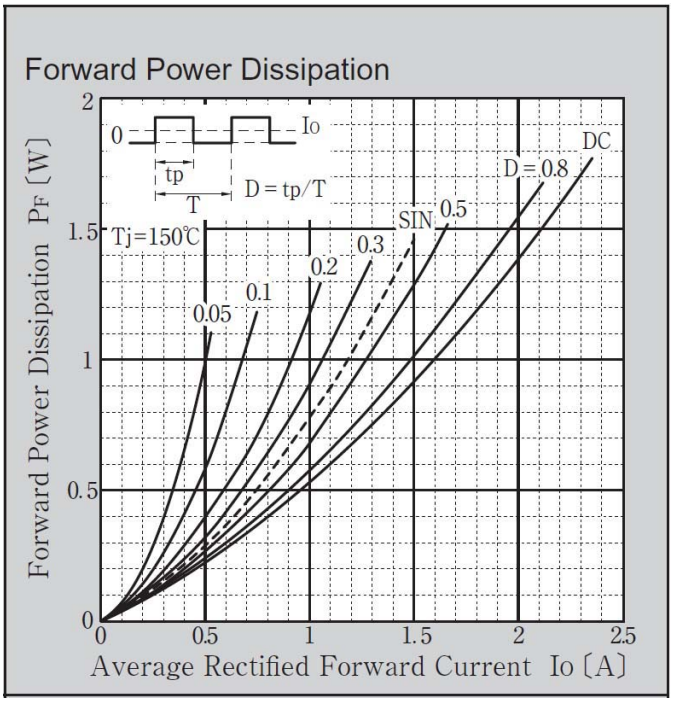
| Item | Symbol | Conditions | Ratings | | | Unit |
|---|---|---|---|---|---|---|
| | | | MIN | TYP | MAX | |
| Forward voltage | $V_F$ | IF=1.5A, Pulse measurement | | | 0.74 | V |
| Reverse current | $I_R$ | VR=80V, Pulse measurement | | | 0.2 | mA |
| Total capacitance | Ct | f=1MHz, VR=10V | | 40 | | pF |
| Thermal resistance | Rth(j-c) | Junction to case | | | 16 | °C/W |
| Thermal resistance | Rth(j-a) | Junction to ambient, On glass-epoxy substrate ※ | | | 65 | °C/W |

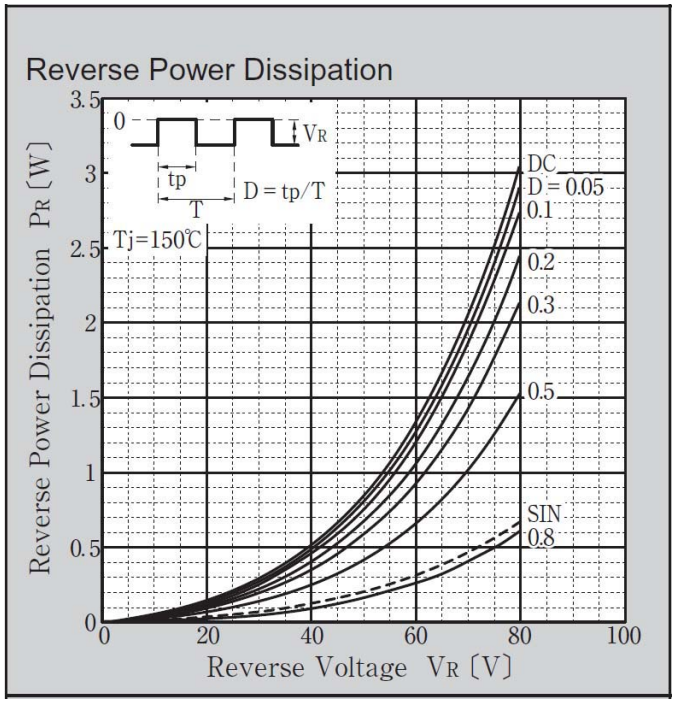
※ ：See the original Specifications

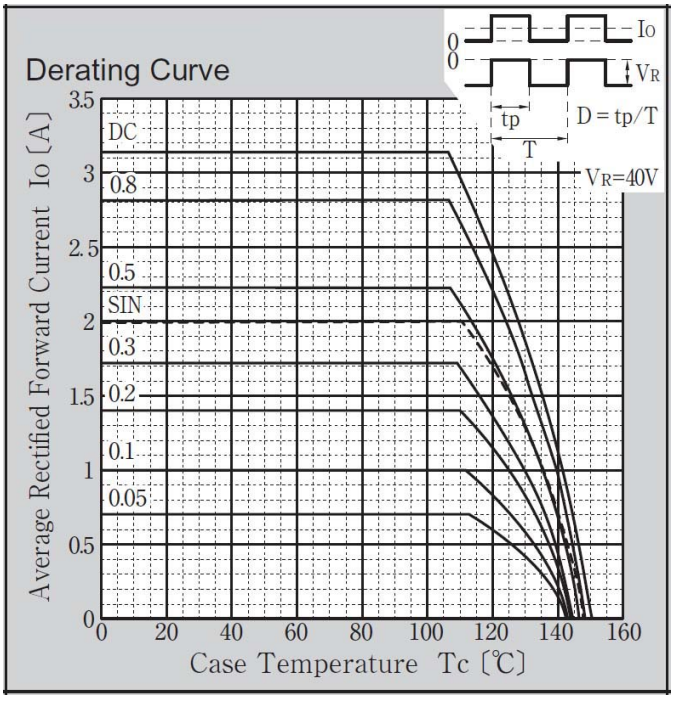
## CHARACTERISTIC DIAGRAMS

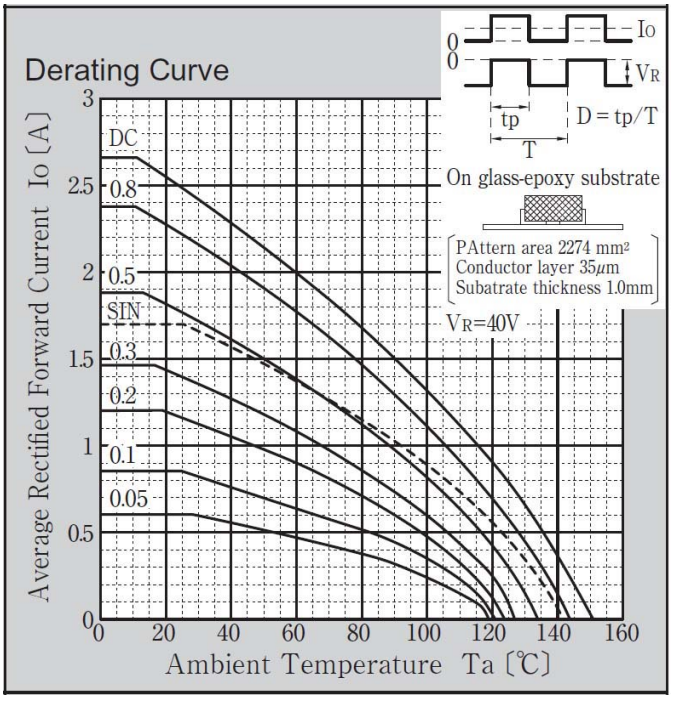


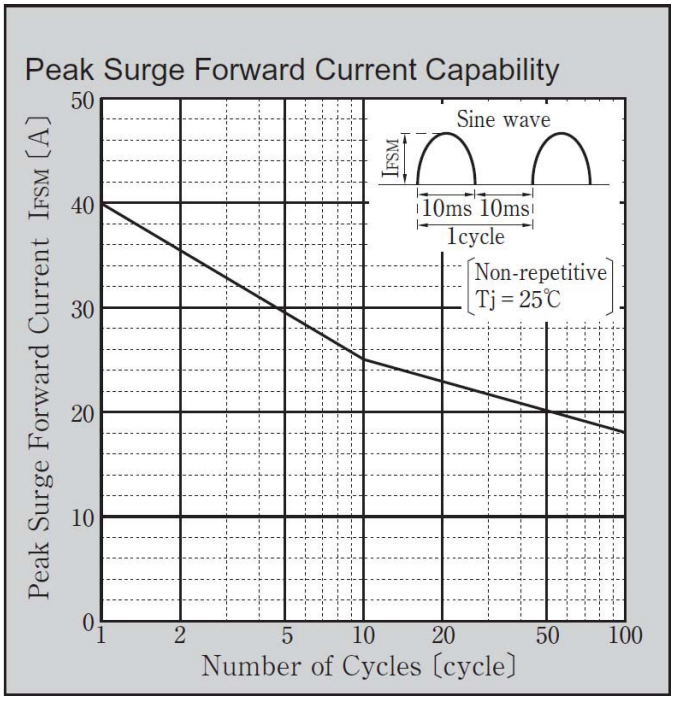



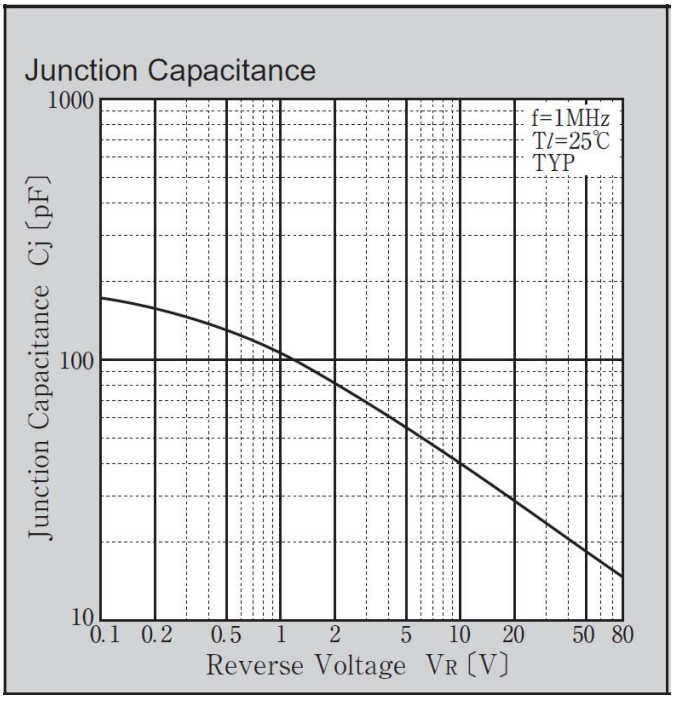



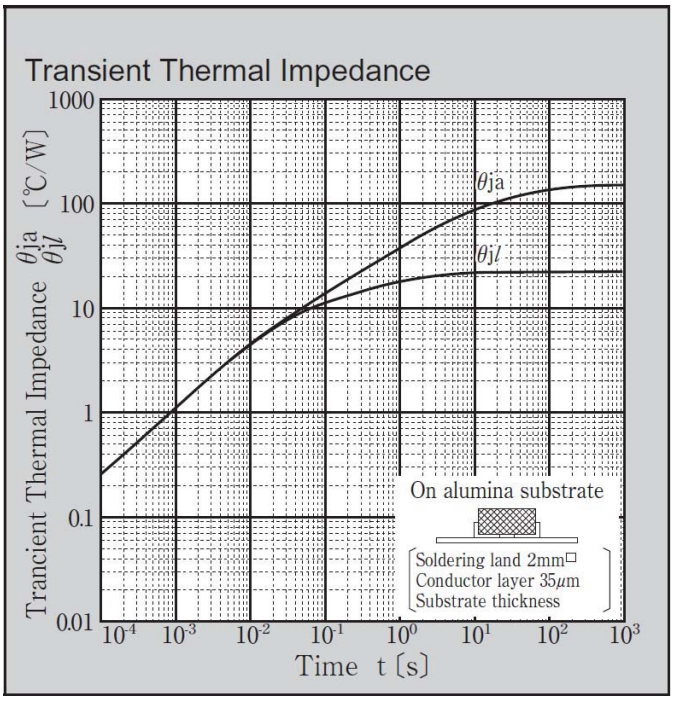



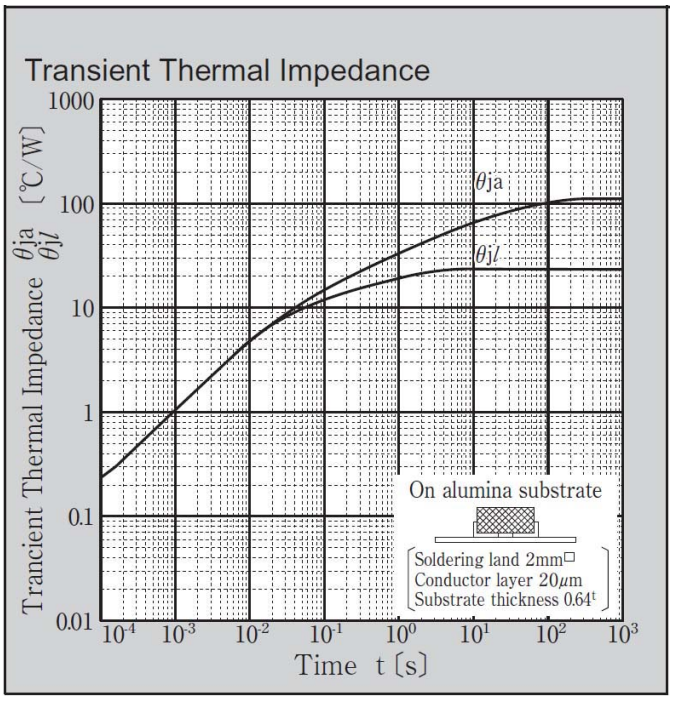

Derating Curve
Io
VR
tp
T
D = tp/T
VR=40V
DC
0.8
0.5
SIN
0.3
0.2
0.1
0.05
Average Rectified Forward Current Io〔A〕
Case Temperature Tc〔℃〕


Derating Curve
Io
VR
tp
T
D = tp/T
On glass-epoxy substrate
PAttern area 2274 mm²
Conductor layer 35μm
Subatrate thickness 1.0mm
VR=40V
DC
0.8
0.5
SIN
0.3
0.2
0.1
0.05
Average Rectified Forward Current Io〔A〕
Ambient Temperature Ta〔℃〕


Peak Surge Forward Current Capability
Sine wave
IFSM
10ms 10ms
1cycle
Non-repetitive
Tj = 25℃
Peak Surge Forward Current IFSM〔A〕
Number of Cycles〔cycle〕


Junction Capacitance
f=1MHz
Tj=25℃
TYP
Junction Capacitance Cj〔pF〕
Reverse Voltage VR〔V〕


Transient Thermal Impedance
Trancient Thermal Impedance θja θjl (℃/W)
1000
100
10
1
0.1
0.01
θja
θjl
On alumina substrate
Soldering land 2mm□
Conductor layer 35μm
Substrate thickness
10-4 10-3 10-2 10-1 100 101 102 103
Time t (s)


Transient Thermal Impedance
Trancient Thermal Impedance θja θjl (℃/W)
1000
100
10
1
0.1
0.01
θja
θjl
On alumina substrate
Soldering land 2mm□
Conductor layer 20μm
Substrate thickness 0.64t
10-4 10-3 10-2 10-1 100 101 102 103
Time t (s)

## Outline Dimensions

unit:mm

B3

| | |
|---|---|
| JEDEC Code | DO-214AC |
| JEITA Code | – |
| House Name | 1F, CF |

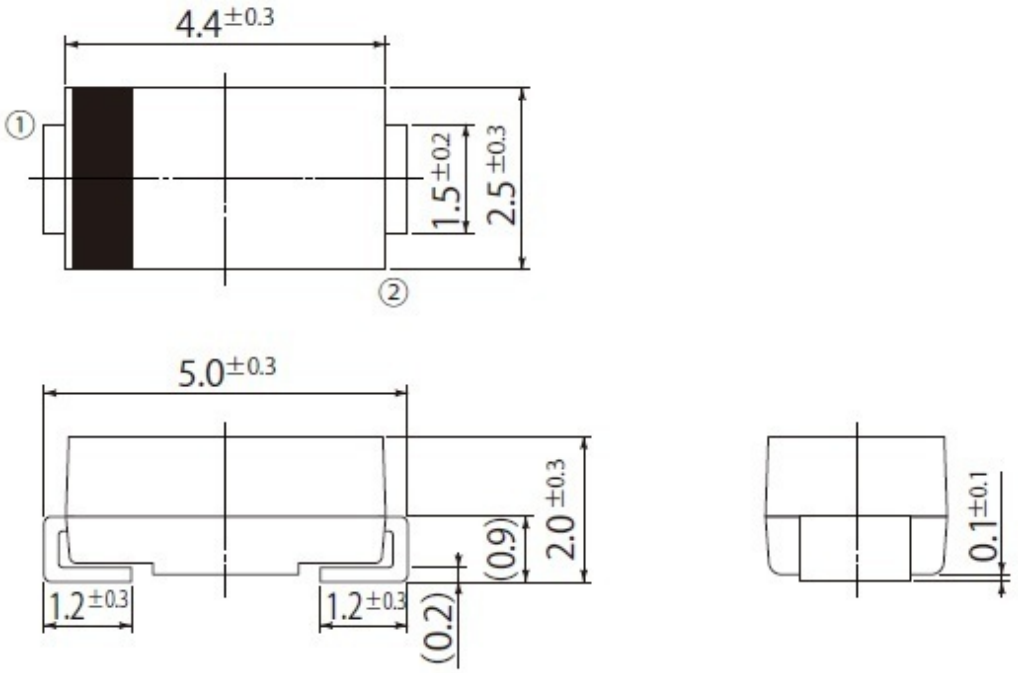
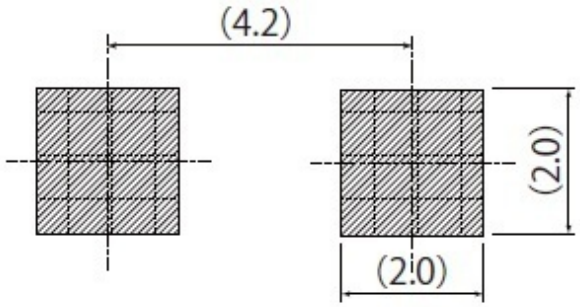



Fig. B3-1 ① ② 




Referential Soldering Pad

- Optimize soldering pad to the board design and soldering condition.

- The content specified herein is subject to change for improvement without notice.
- If you wish to use any such products, please be sure to refer to the specifications.

U182-1 (2026.08)

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