ShinDengen

# D1FS4

## Schottky Barrier Diodes
## 40V, 1.1A

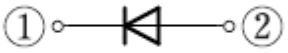
### Feature

- Small SMD
- High Recovery Speed
- Low $V_F$
- Based on AEC-Q101
- 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 | °C |
| Junction temperature | Tj | | 150 | °C |
| Repetitive peak reverse voltage | $V_{RRM}$ | | 40 | V |
| Repetitive peak surge reverse voltage | $V_{RRSM}$ | Pulse width 0.5ms, duty=1/40 | 45 | V |
| Average forward current | $I_F$(AV) | 50Hz sine wave, Resistance load, On alumina substrate, Ta=51°C | 1.1 | A |
| Average forward current | $I_F$(AV) | 50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=44°C | 0.85 | A |
| Surge forward current | $I_{FSM}$ | 50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=125°C | 30 | A |
| Repetitive peak surge reverse power | $P_{RRSM}$ | Pulse width 10µs, Tj=25°C | 60 | W |

※ ：See the original Specifications



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

| Item | Symbol | Conditions | Ratings | | | Unit |
|---|---|---|---|---|---|---|
| | | | MIN | TYP | MAX | |
| Forward voltage | $V_F$ | IF=1.1A, Pulse measurement | | | 0.55 | V |
| Reverse current | $I_R$ | VR=40V, Pulse measurement | | | 1 | mA |
| Total capacitance | Ct | f=1MHz, VR=10V | | 65 | | pF |
| Thermal resistance | Rth(j-l) | Junction to lead | | | 23 | °C/W |
| Thermal resistance | Rth(j-a) | Junction to ambient, On alumina substrate | | | 108 | °C/W |
| Thermal resistance | Rth(j-a) | Junction to ambient, On glass-epoxy substrate | | | 157 | °C/W |

※ ：See the original Specifications



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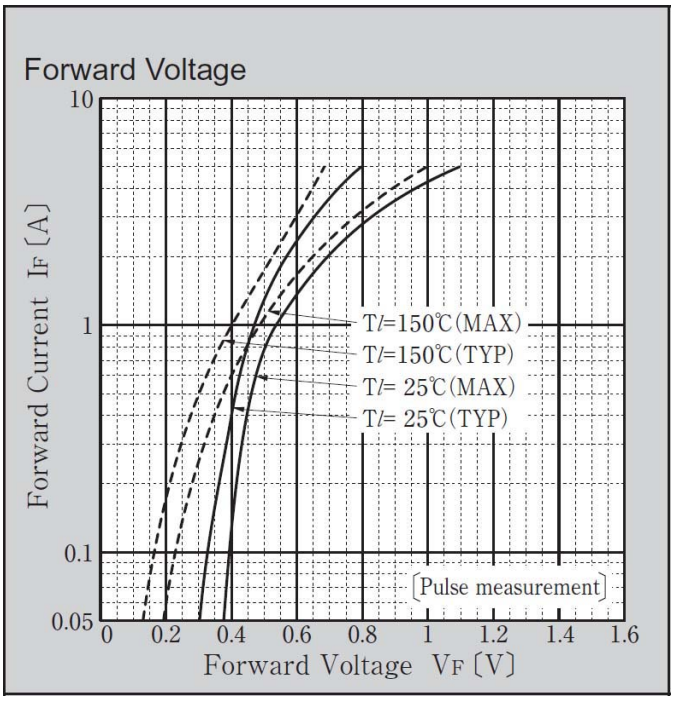
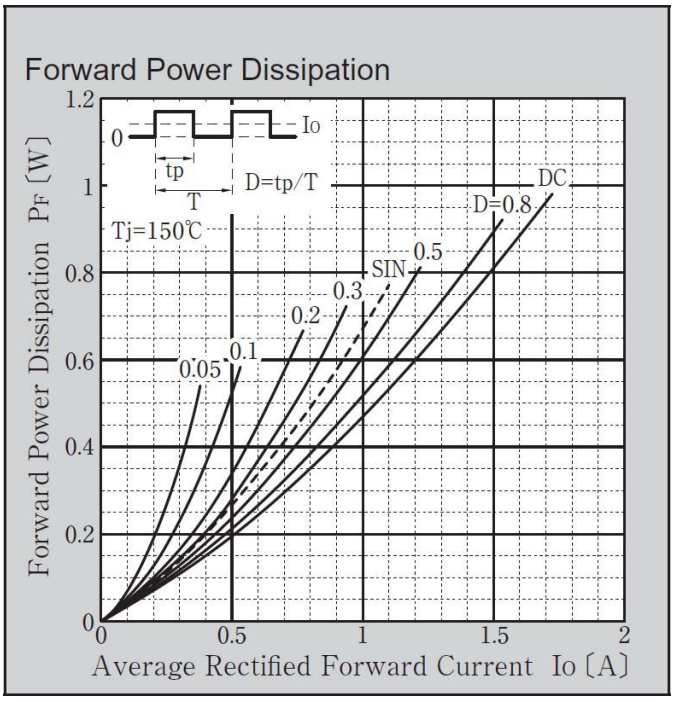
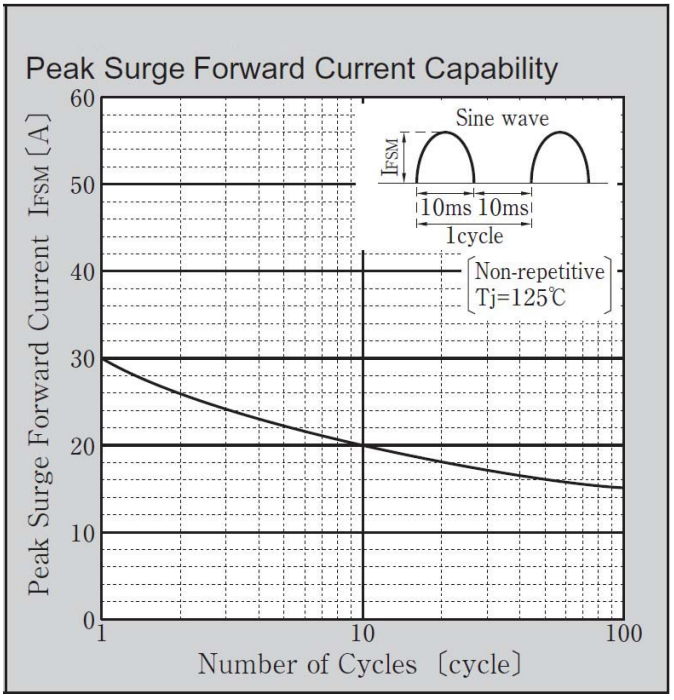
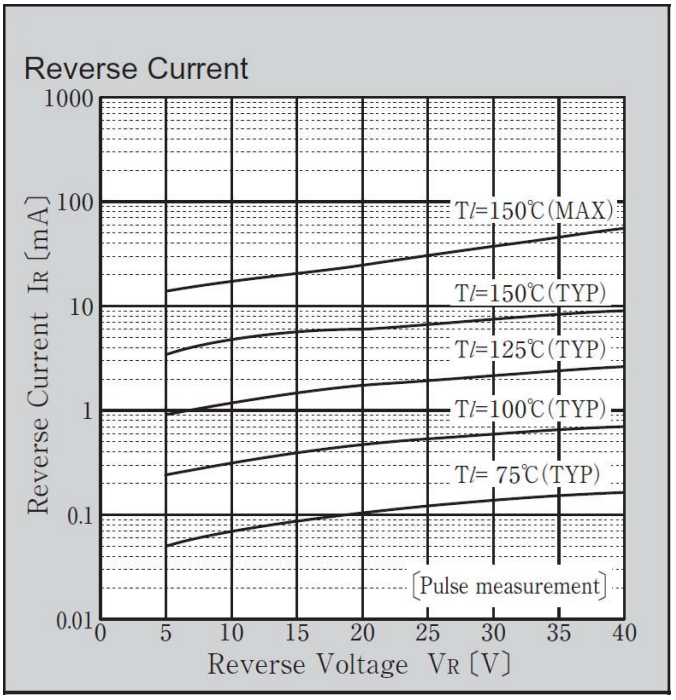
## CHARACTERISTIC DIAGRAMS



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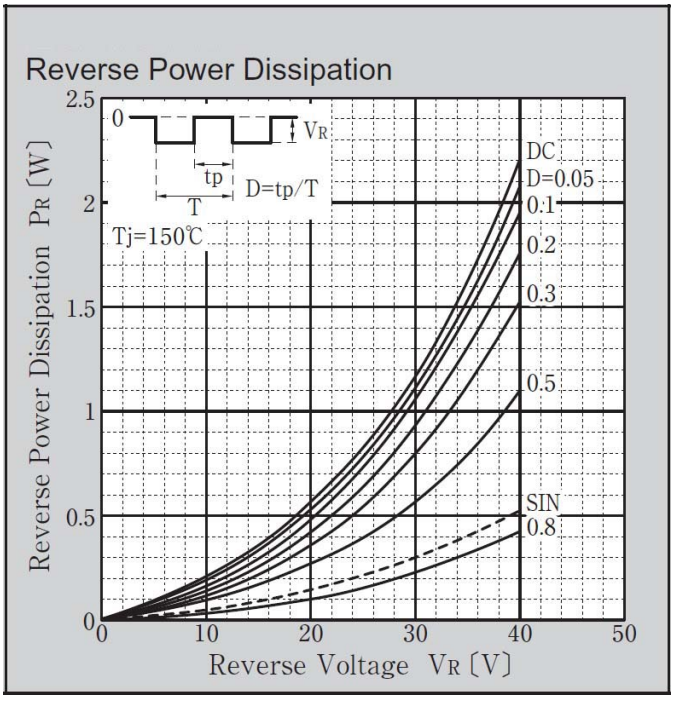


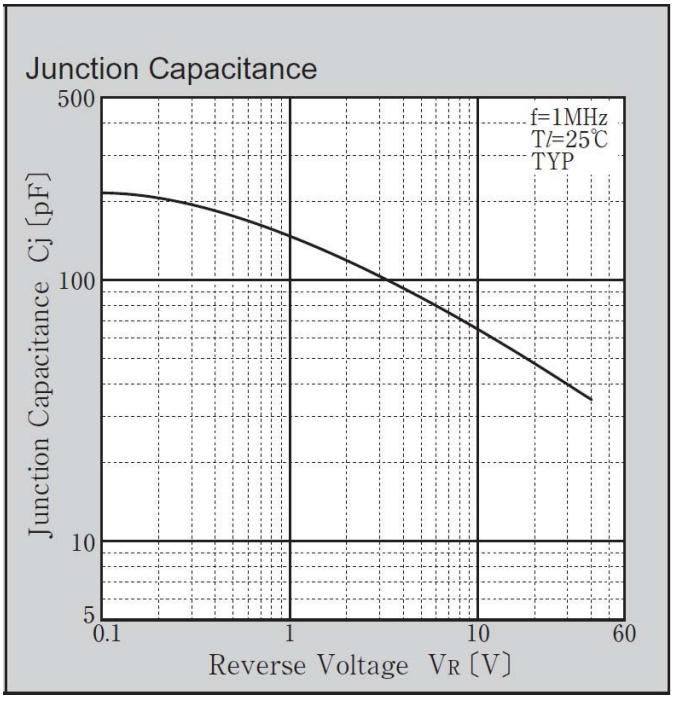


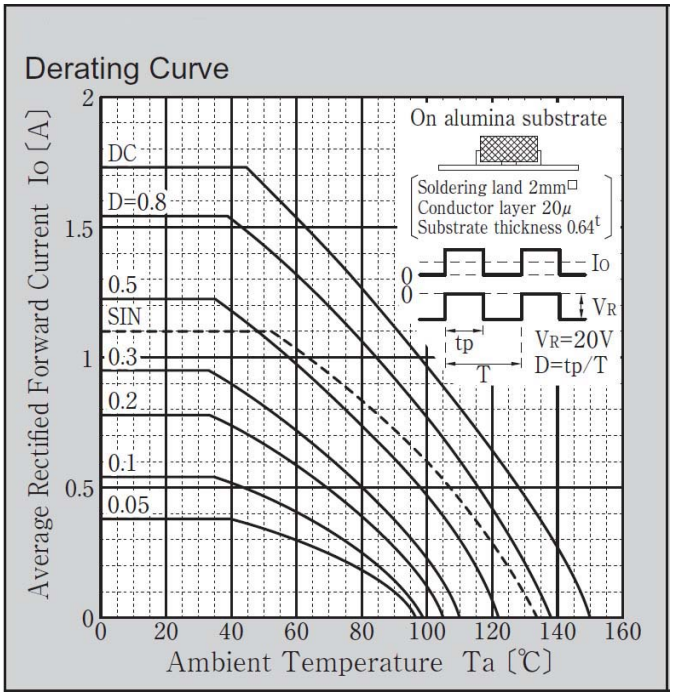


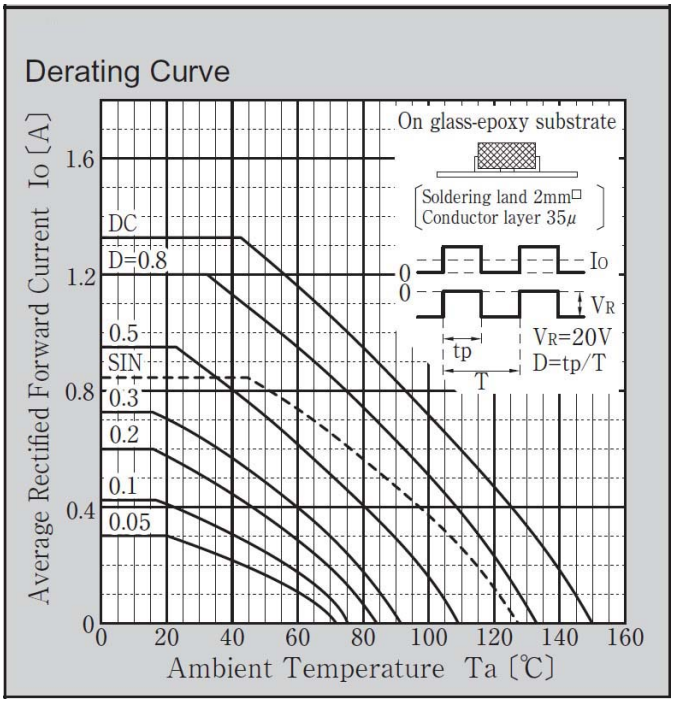




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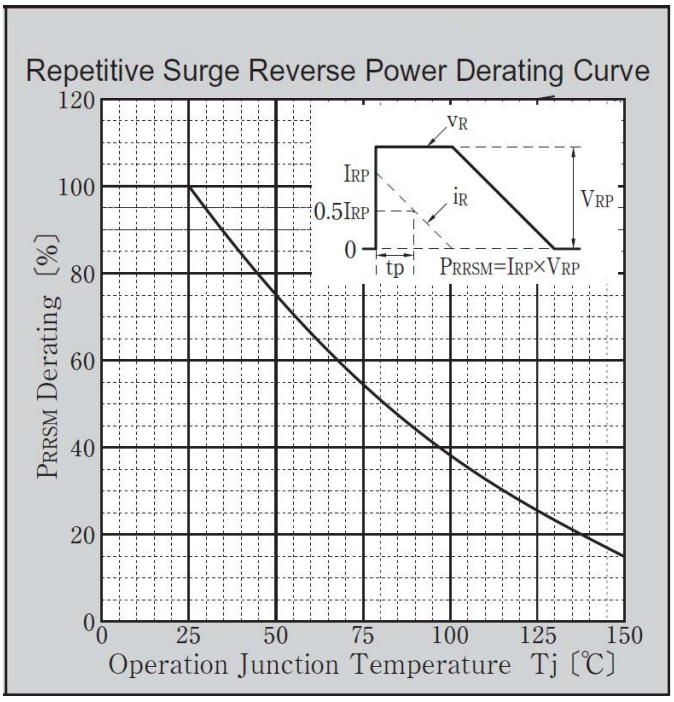


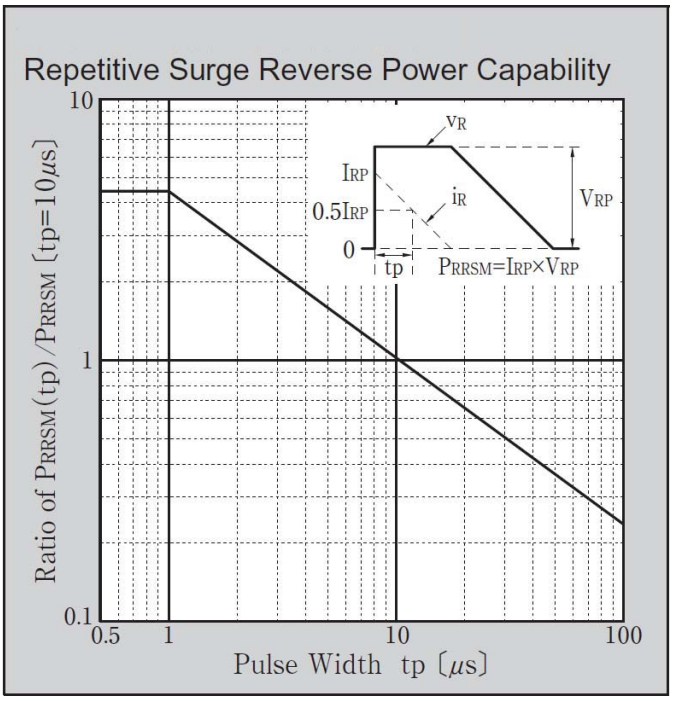




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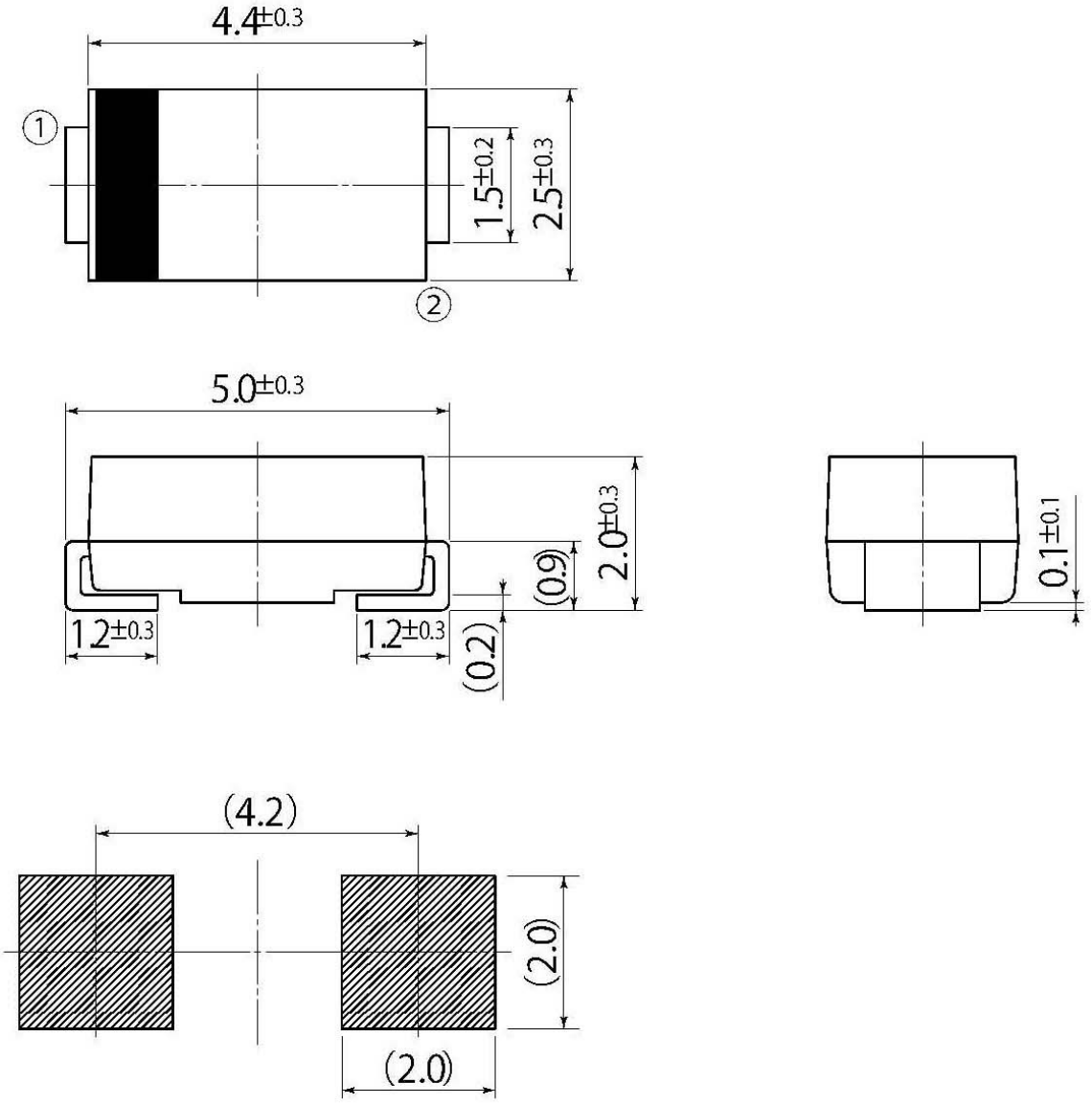
## Outline Dimensions

unit:mm

scale: 10/1

B3

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




Referential Soldering Pad

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



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## Notes

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