

D1FS6A  
Schottky Barrier Diodes  
60V, 2.5A

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        |                                                                      | -55 to 150 | °C   |
| Repetitive peak reverse voltage | $V_{RRM}$ |                                                                      | 60         | V    |
| Average forward current         | $I_F(AV)$ | 50Hz sine wave, Resistance load, Tl=103°C                            | 2.5        | A    |
| Average forward current         | $I_F(AV)$ | 50Hz sine wave, Resistance load, On alumina substrate, Ta=25°C ※     | 1.5        | A    |
| Average forward current         | $I_F(AV)$ | 50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※ | 1          | A    |
| Surge forward current           | $I_{FSM}$ | 50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C          | 60         | A    |

※ :See the original Specifications

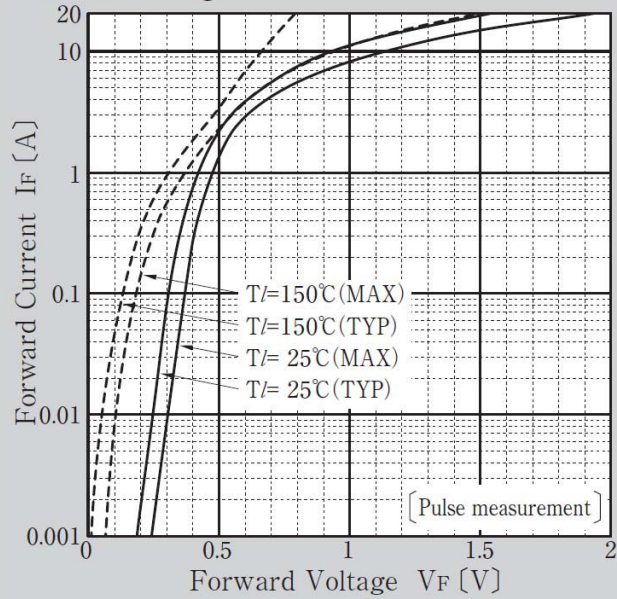
**Electrical Characteristics** (unless otherwise specified : Tl=25°C)

| Item               | Symbol   | Conditions                                      | Ratings |     |      | Unit |
|--------------------|----------|-------------------------------------------------|---------|-----|------|------|
|                    |          |                                                 | MIN     | TYP | MAX  |      |
| Forward voltage    | $V_F$    | IF=2.5A, Pulse measurement                      |         |     | 0.57 | V    |
| Forward voltage    | $V_F$    | IF=1A, Pulse measurement                        |         |     | 0.47 | V    |
| Reverse current    | $I_R$    | VR=60V, Pulse measurement                       |         |     | 0.2  | mA   |
| Total capacitance  | $C_t$    | f=1MHz, VR=10V                                  |         | 80  |      | 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 |

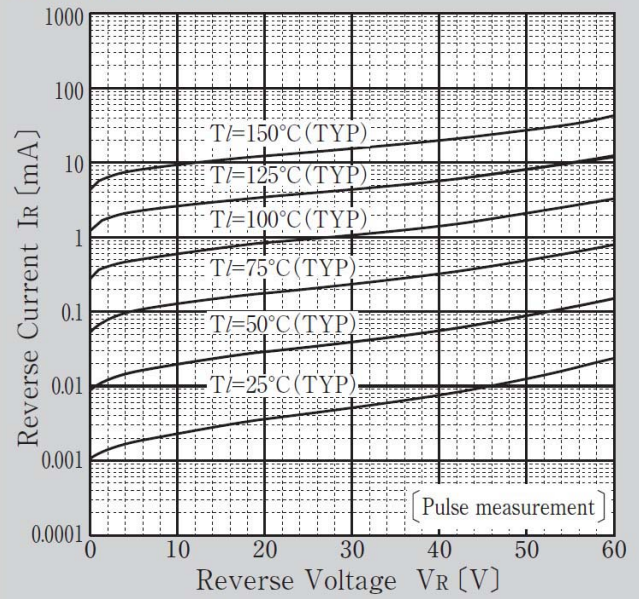
※ :See the original Specifications

## CHARACTERISTIC DIAGRAMS

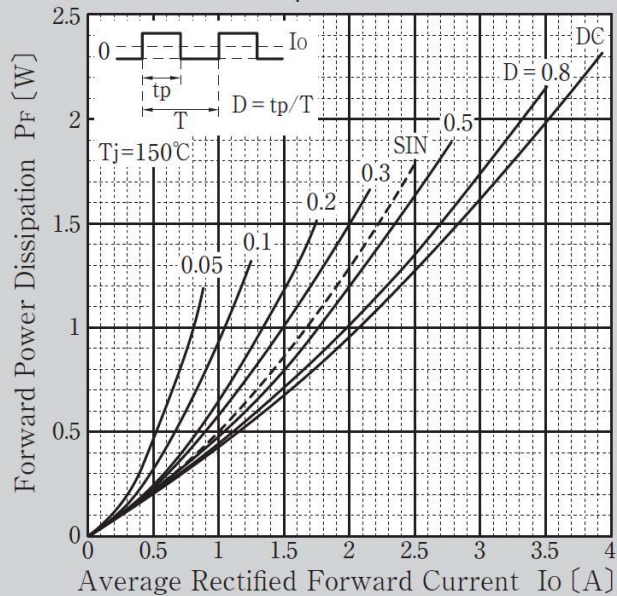
Forward Voltage



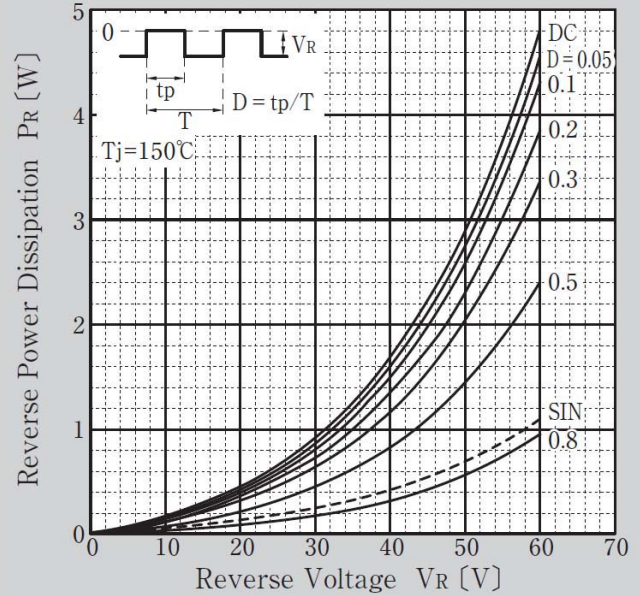
Reverse Current

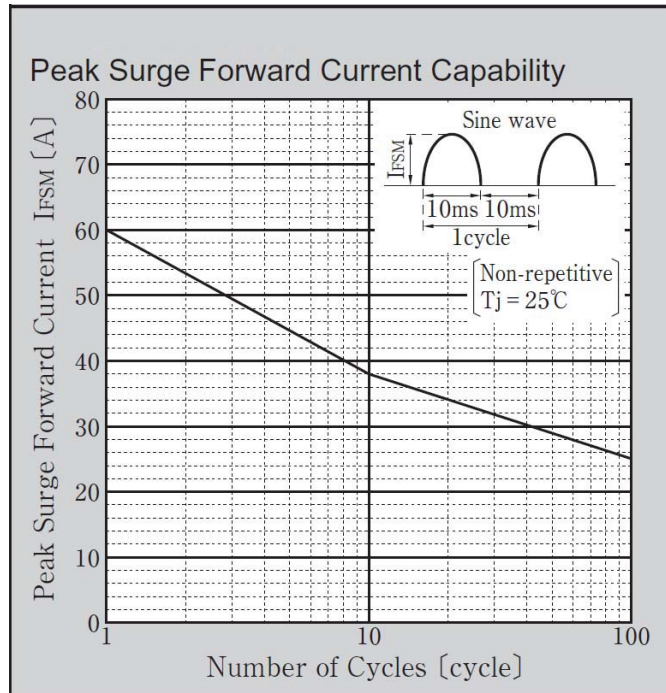
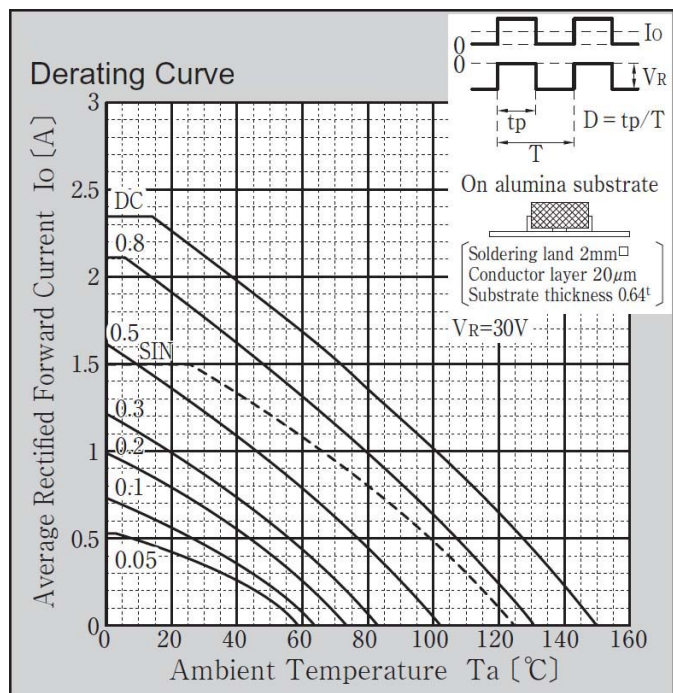
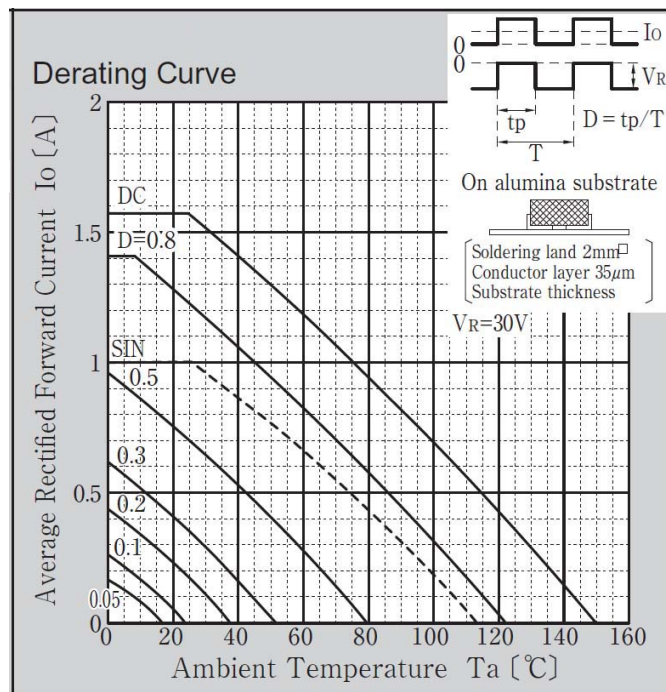
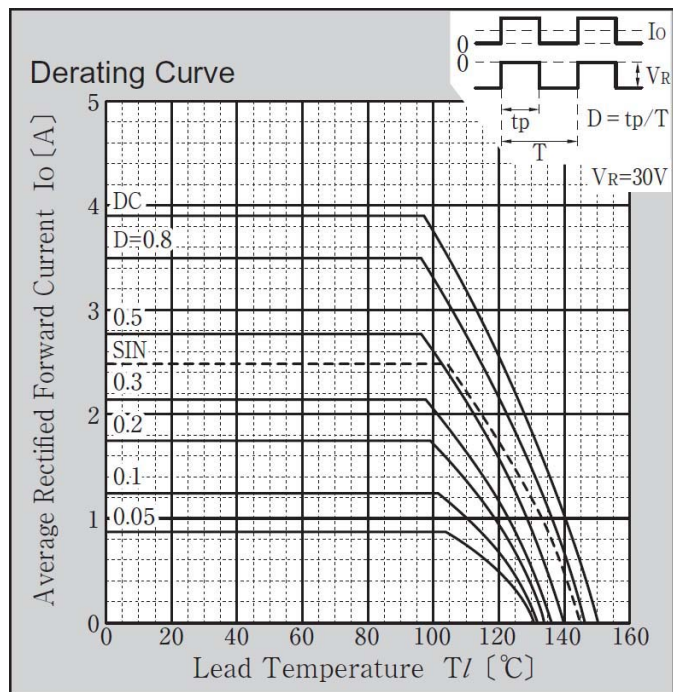


Forward Power Dissipation

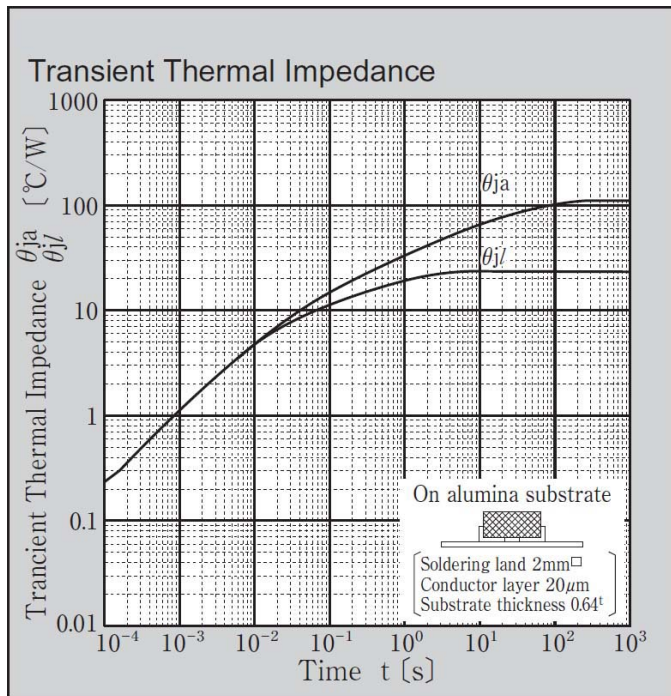
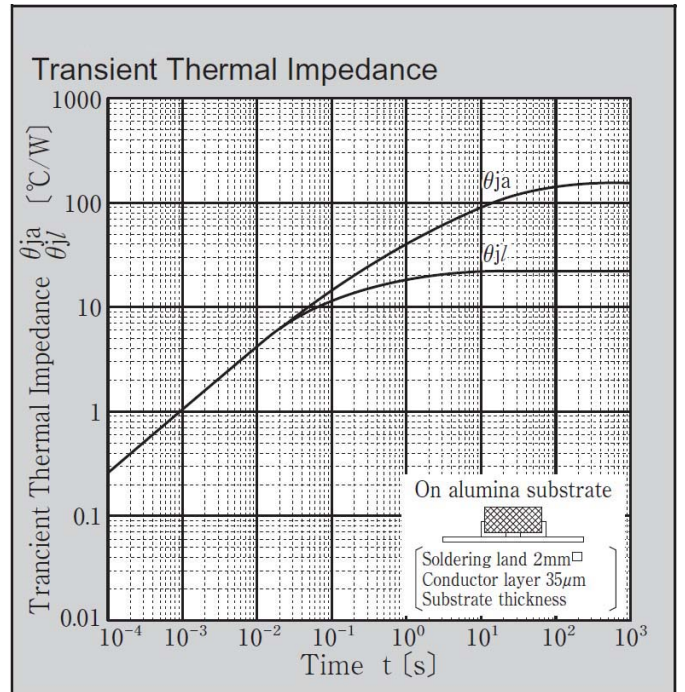
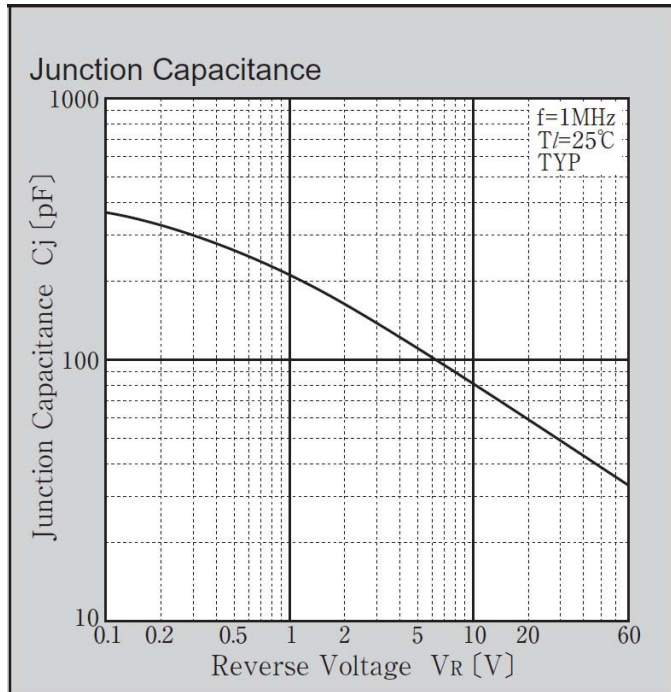


Reverse Power Dissipation



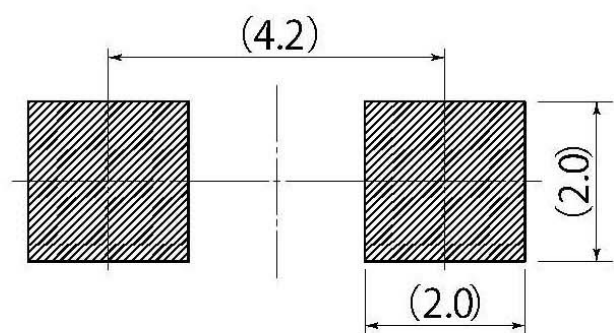
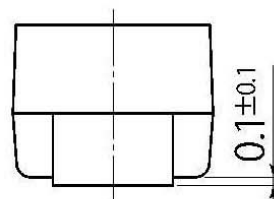
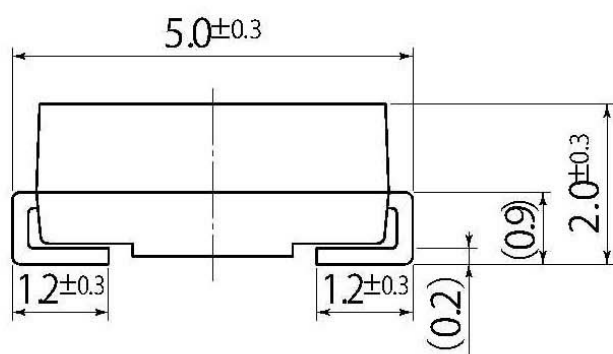
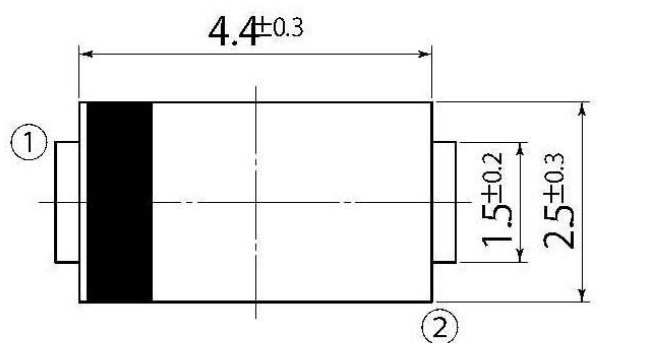






B3

|            |          |
|------------|----------|
| 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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