

# D4F60

## General Rectifying Diodes

600V, 4.0A

### Feature

- Small SMD
- High  $I_{FSM}$
- Available for automotive use
- Pb free terminal
- RoHS:Yes

### OUTLINE

Package (House Name): 2F



### Equivalent circuit



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

| Item                            | Symbol    | Conditions   | Ratings    | Unit             |
|---------------------------------|-----------|--|------------|------------------|
| Storage temperature             | $T_{stg}$ |  | -55 to 150 | °C               |
| Junction temperature            | $T_j$     |  | -55 to 150 | °C               |
| Repetitive peak reverse voltage | $V_{RRM}$ |  | 600        | V                |
| Average forward current         | $I_F(AV)$ | 50Hz sine wave, Resistance load, Tl=68°C                             | 4          | A                |
| Average forward current         | $I_F(AV)$ | 50Hz sine wave, Resistance load, On alumina substrate, Ta=25°C ※     | 1.85       | A                |
| Average forward current         | $I_F(AV)$ | 50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※ | 1.3        | A                |
| Surge forward current           | $I_{FSM}$ | 50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C           | 200        | A                |
| Current squared time            | $I^2t$    | 1ms ≤ tp < 10ms, Tj=25°C   | 150        | A <sup>2</sup> s |

※ : See the original Specifications

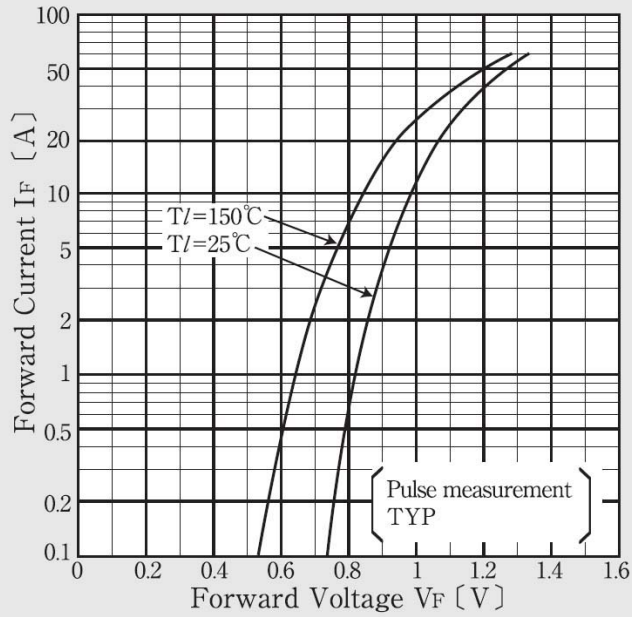
**Electrical Characteristics** (unless otherwise specified : Tl=25°C)

| Item               | Symbol        | Conditions                                      | Ratings |     |      | Unit          |
|--------------------|---------------|---|---------|-----|------|---------------|
|                    |               |   | MIN     | TYP | MAX  |               |
| Forward voltage    | $V_F$         | $I_F=4A$ , Pulse measurement                    |         |     | 0.95 | V             |
| Reverse current    | $I_R$         | $V_R=600V$ , Pulse measurement                  |         |     | 10   | $\mu A$       |
| Thermal resistance | $R_{th(j-l)}$ | Junction to lead                                |         |     | 23   | $^{\circ}C/W$ |
| Thermal resistance | $R_{th(j-a)}$ | Junction to ambient, On alumina substrate *     |         |     | 80   | $^{\circ}C/W$ |
| Thermal resistance | $R_{th(j-a)}$ | Junction to ambient, On glass-epoxy substrate * |         |     | 115  | $^{\circ}C/W$ |

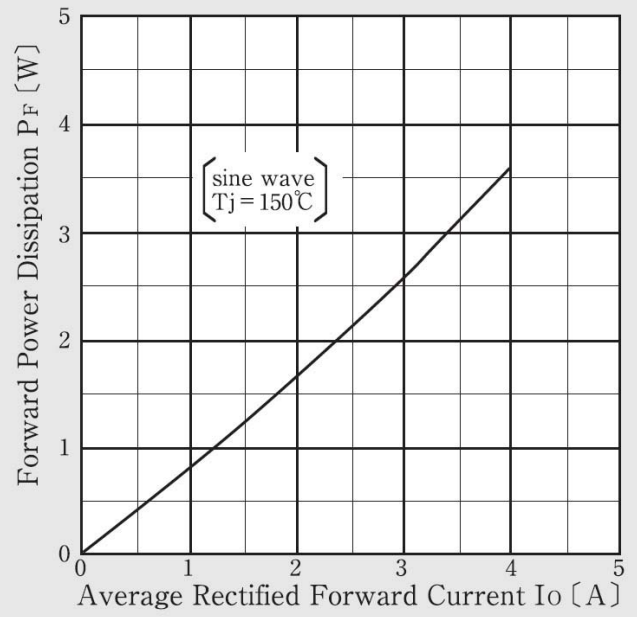
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

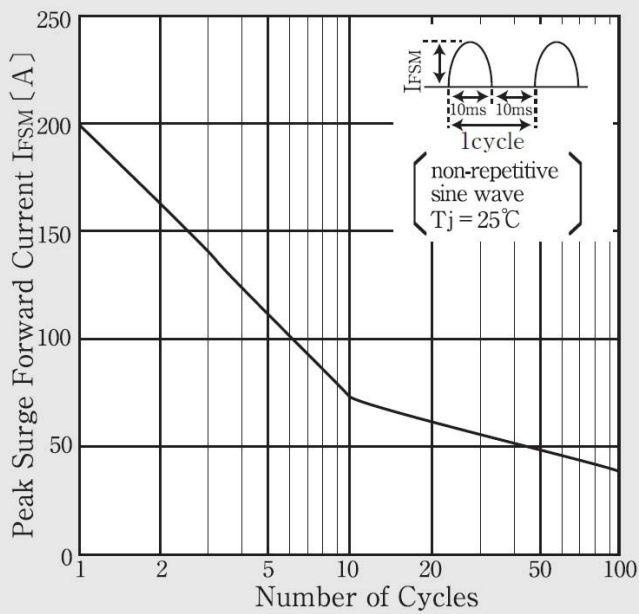
### Forward Voltage



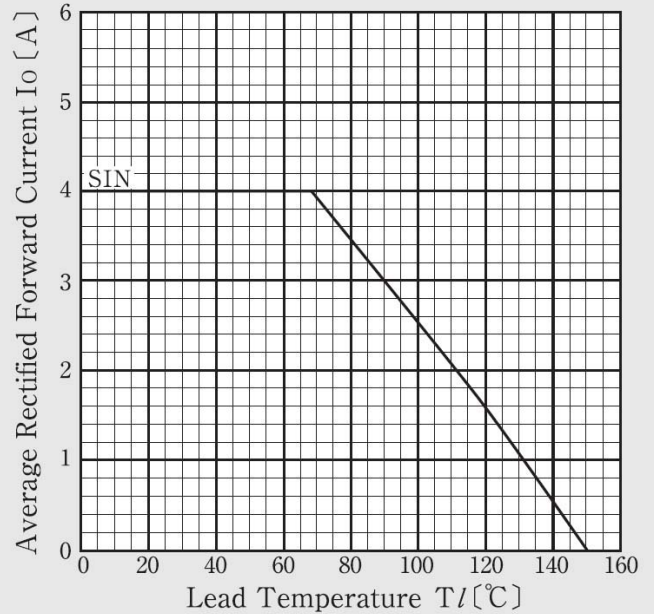
### Forward Power Dissipation

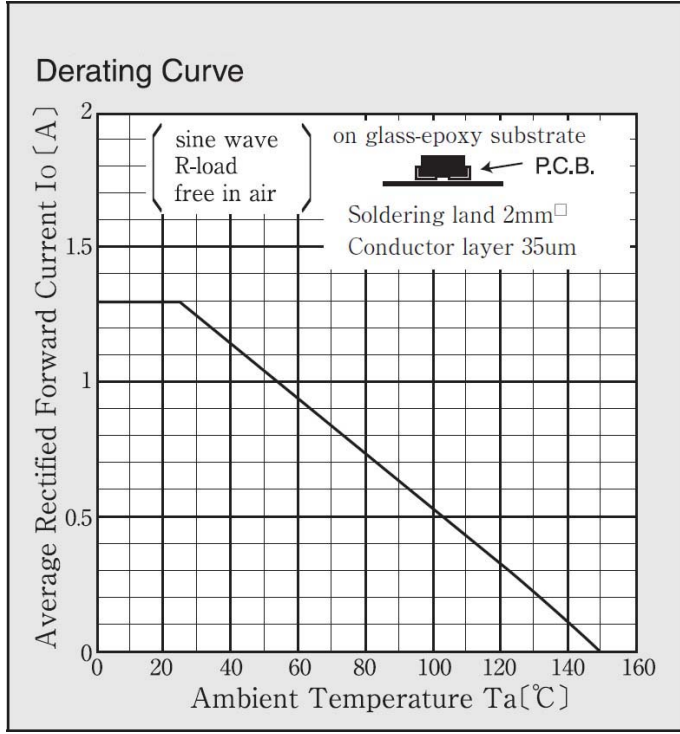
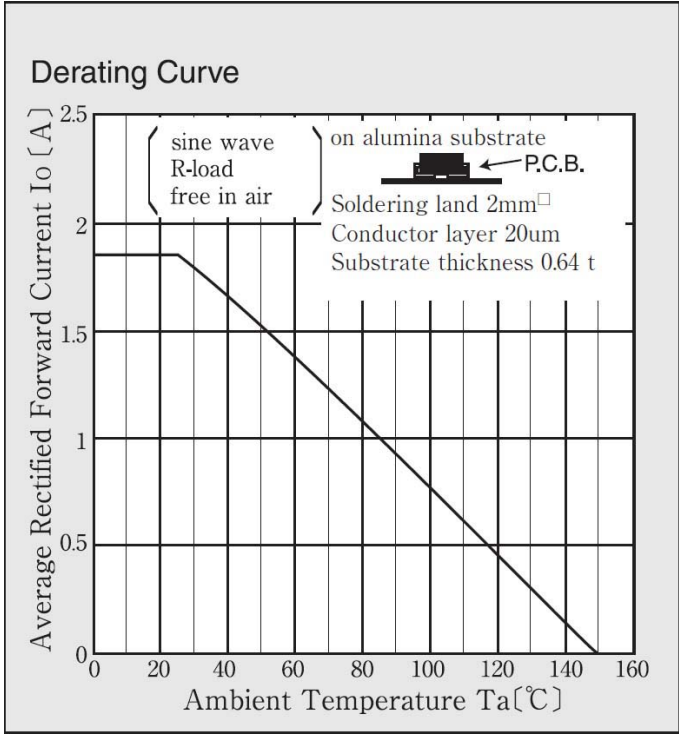


### Peak Surge Forward Current Capability



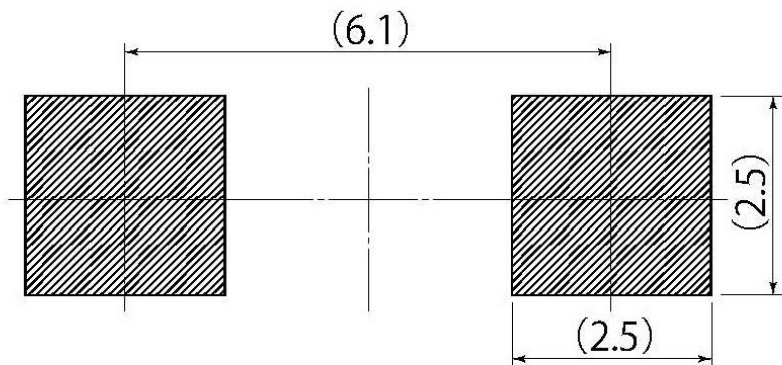
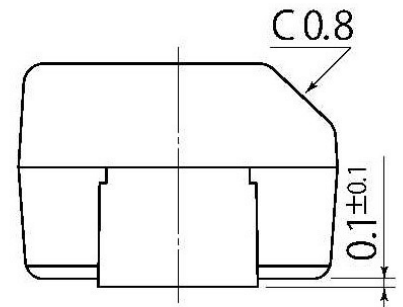
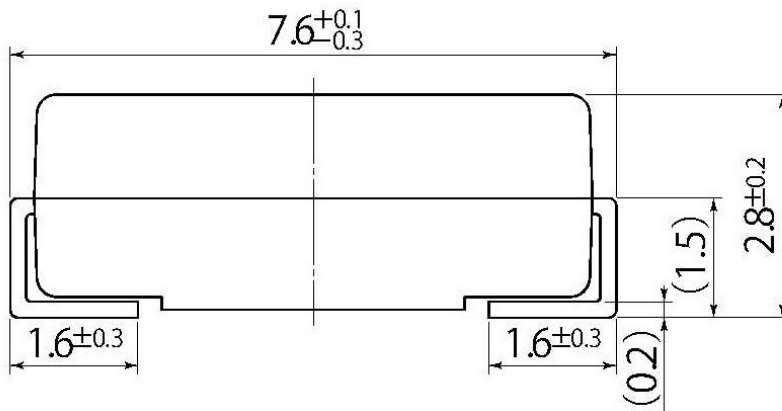
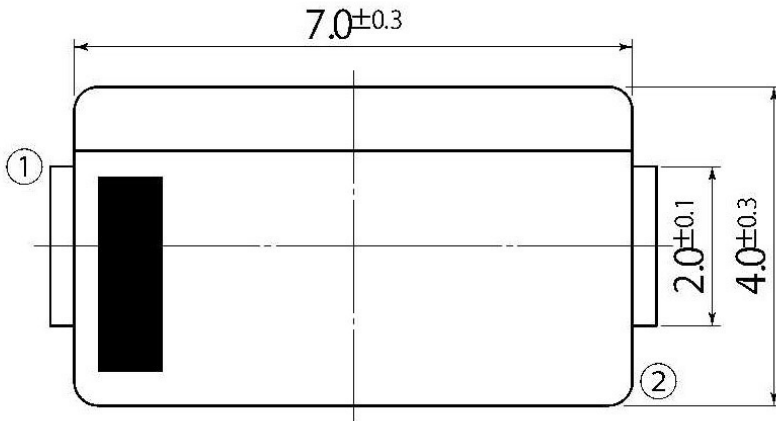
### Derating Curve





B9

|            |    |
|------------|----|
| JEDEC Code | —  |
| JEITA Code | —  |
| House Name | 2F |



Referential Soldering Pad

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

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