

M2FL20U

Fast Recovery Diodes

200V, 1.5A

Feature

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

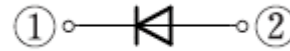
OUTLINE

Package (House Name): M2F

Package (JEDEC Code): DO-214AA similar



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 | | 150 | °C |
| Repetitive peak reverse voltage | V _{RRM} | | 200 | V |
| Average forward current | I _{F(AV)} | 50Hz sine wave, Resistance load, On alumina substrate, Ta=31°C | 1.5 | A |
| Average forward current | I _{F(AV)} | 50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=32°C | 1.2 | A |
| Surge forward current | I _{FSM} | 50Hz sine wave, Non-repetitive 1 cycle, Peak value, T _j =25°C | 50 | A |

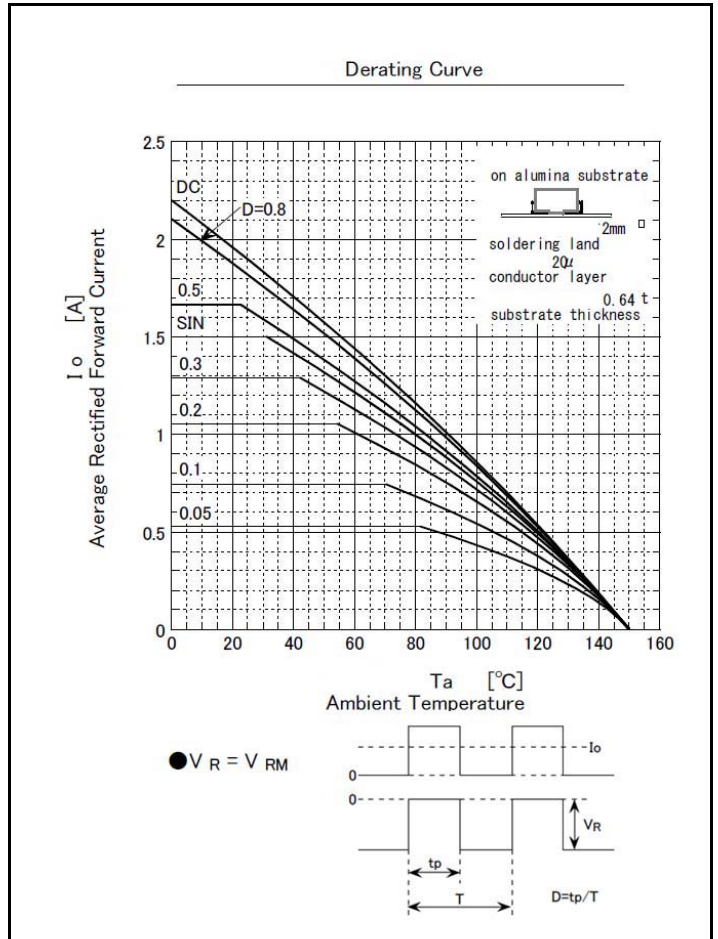
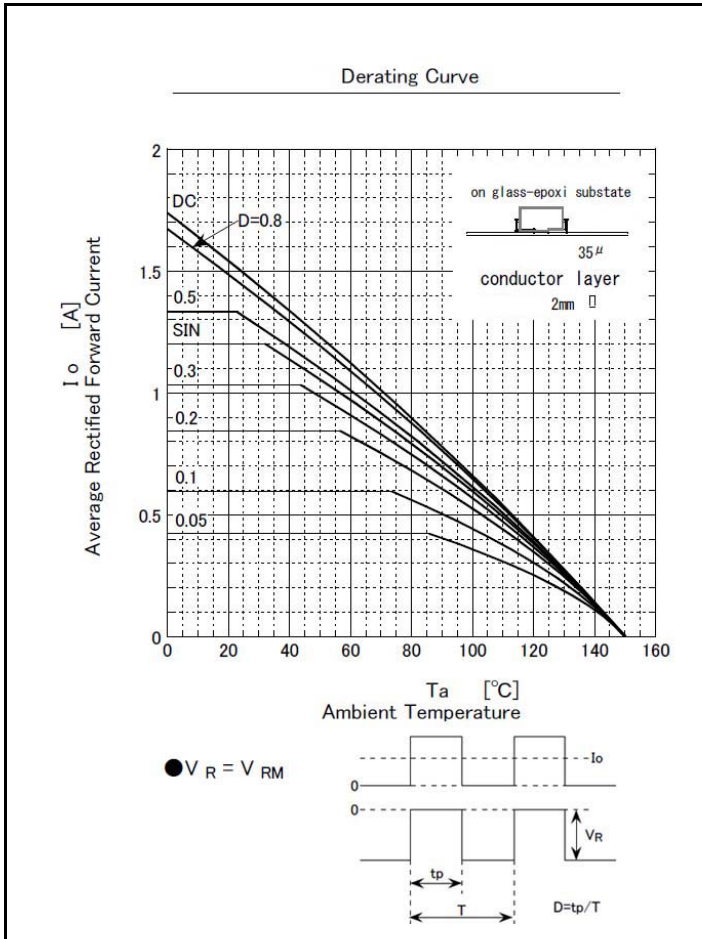
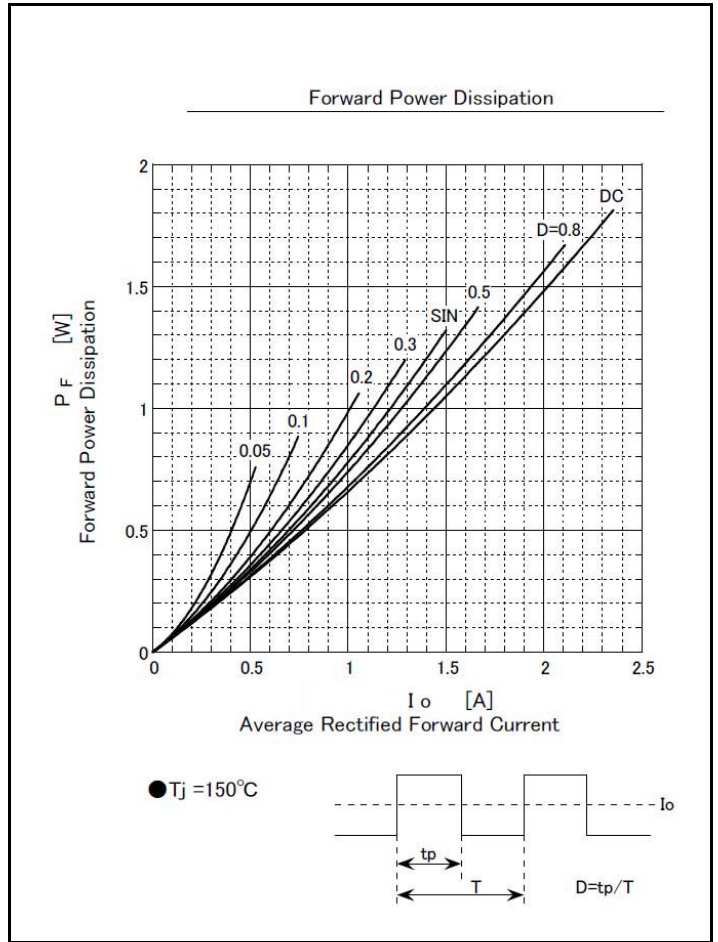
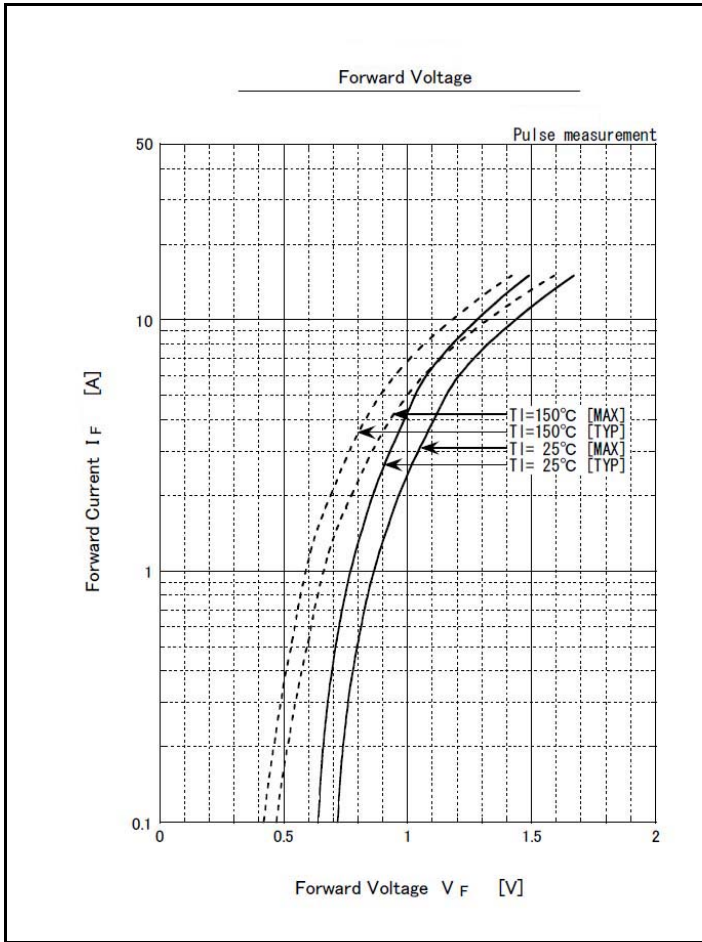
※ :See the original Specifications

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

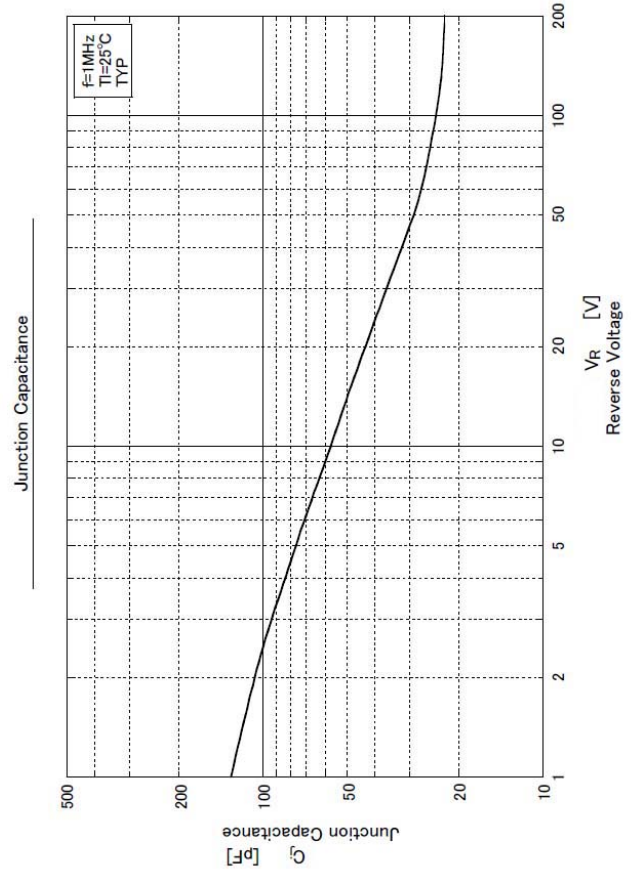
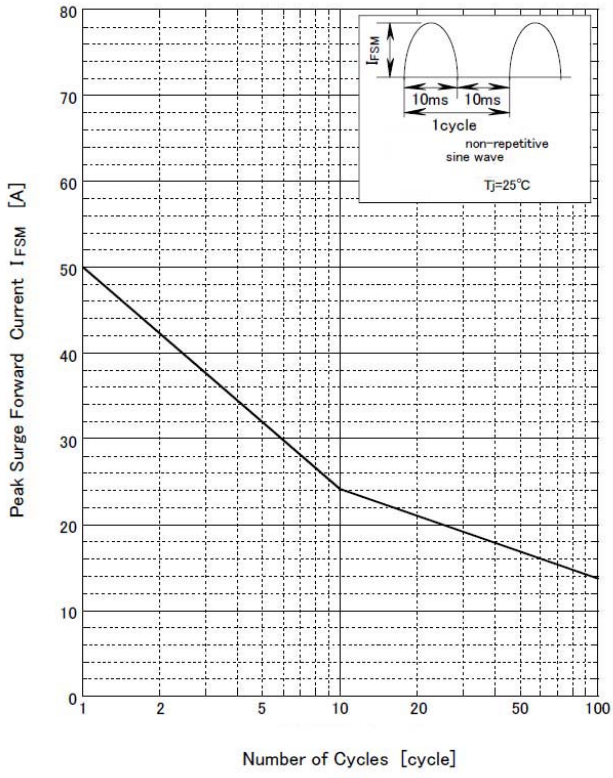
| Item | Symbol | Conditions | Ratings | | | Unit |
|-----------------------|---------------|---|---------|-----|------|---------------|
| | | | MIN | TYP | MAX | |
| Forward voltage | V_F | $I_F=1.5A$, Pulse measurement | | | 0.92 | V |
| Reverse current | I_R | $V_R=200V$, Pulse measurement | | | 10 | μA |
| Reverse recovery time | t_{rr} | $I_F=0.5A$, $I_R=1.0A$ | | | 35 | ns |
| Thermal resistance | $R_{th(j-l)}$ | Junction to lead | | | 33 | $^{\circ}C/W$ |
| Thermal resistance | $R_{th(j-a)}$ | Junction to ambient, On alumina substrate | | | 90 | $^{\circ}C/W$ |
| Thermal resistance | $R_{th(j-a)}$ | Junction to ambient, On glass-epoxy substrate | | | 120 | $^{\circ}C/W$ |

* :See the original Specifications

CHARACTERISTIC DIAGRAMS

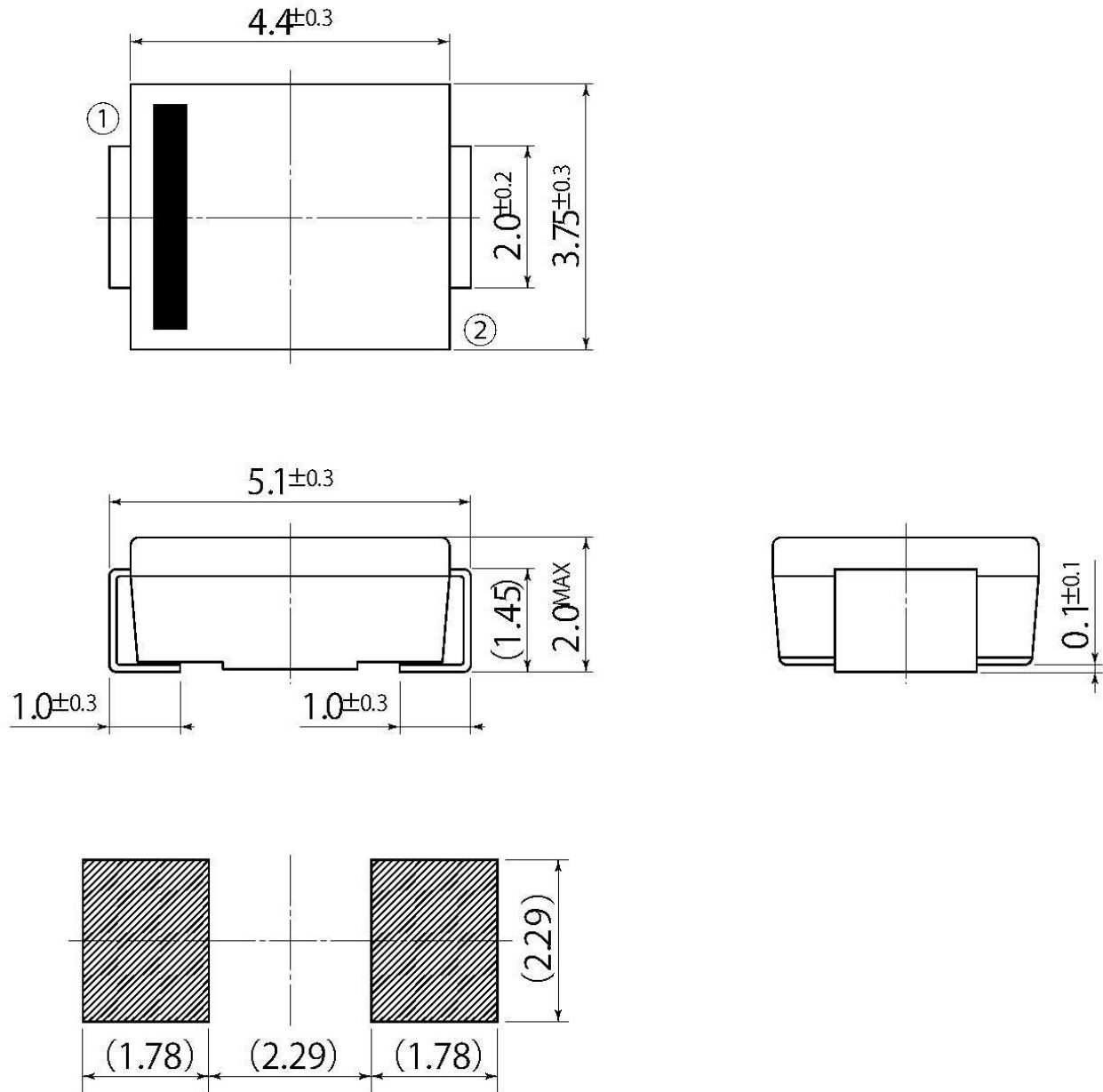


Peak Surge Forward Capability



B6

| | |
|------------|------------------|
| JEDEC Code | DO-214AA similar |
| JEITA Code | — |
| House Name | M2F |



Referential Soldering Pad

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

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