ShinDengen

M2FL20U

Fast Recovery Diodes
200V, 1.5A

Feature

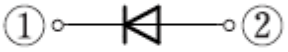
- Small SMD
- High Recovery Speed
- Available for automotive use
- Pb free terminal
- RoHS:Yes

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 temperrature	Tstg		-55 to 150	℃
Junction temperature	Tj		150	℃
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, Tj=25°C	50	A

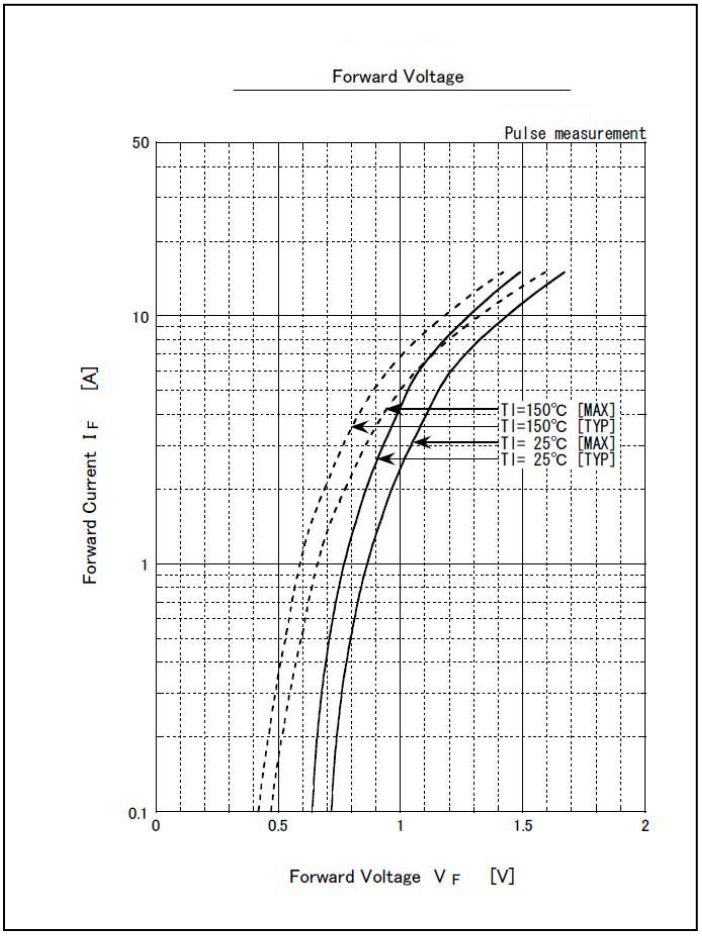
※ ：See the original Specifications

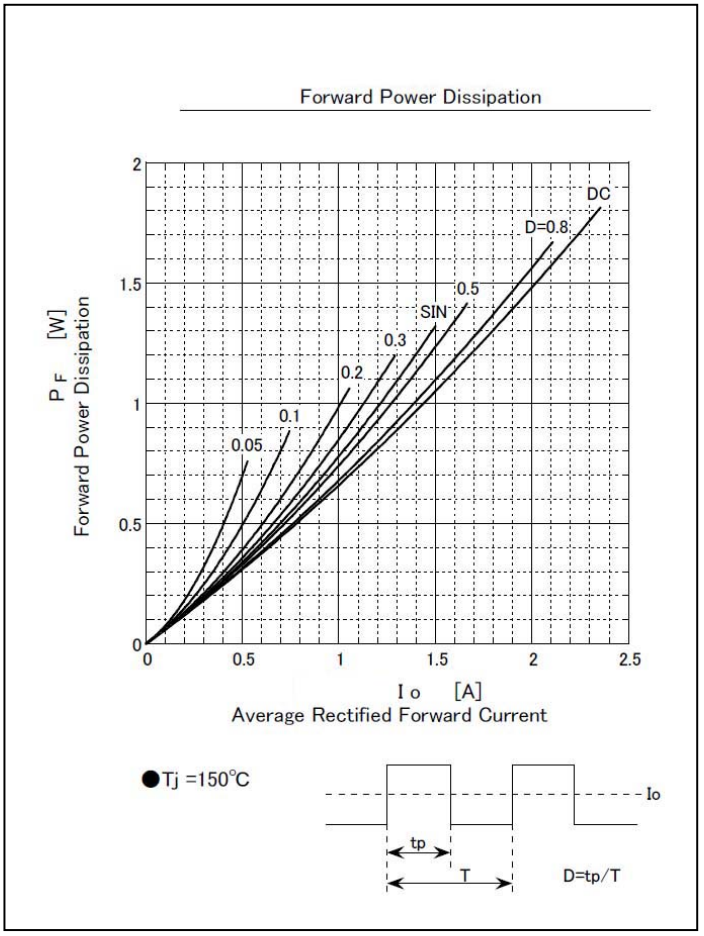
Electrical Characteristics (unless otherwise specified : Tl=25°C)

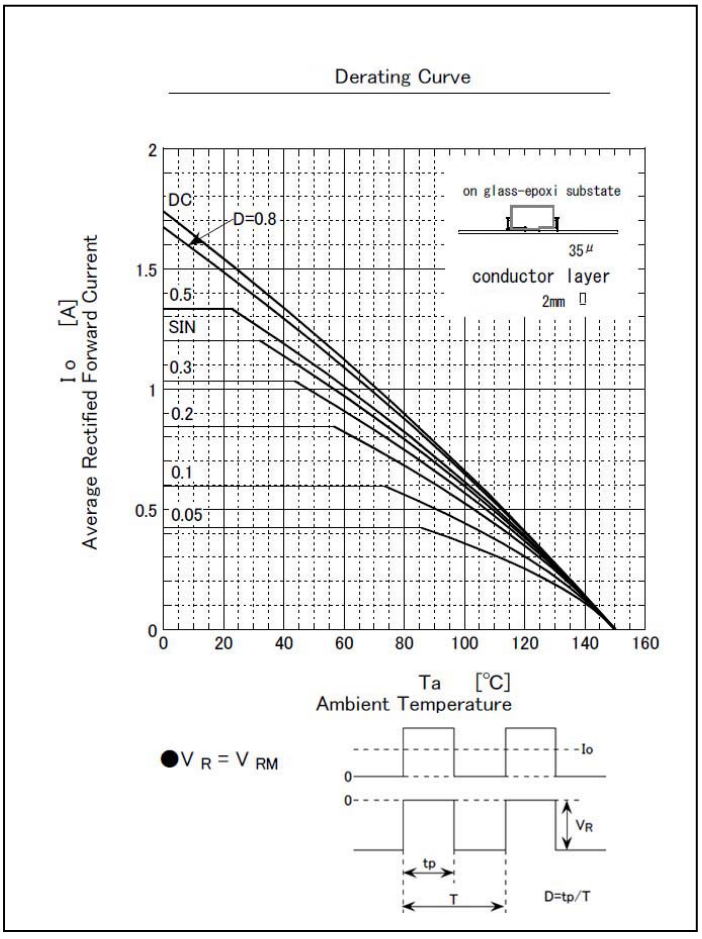
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=1.5A, Pulse measurement			0.92	V
Reverse current	I_R	VR=200V, Pulse measurement			10	μA
Reverse recovery time	trr	IF=0.5A, IR=1.0A			35	ns
Thermal resistance	Rth(j-l)	Junction to lead			33	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On alumina substrate			90	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate			120	°C/W

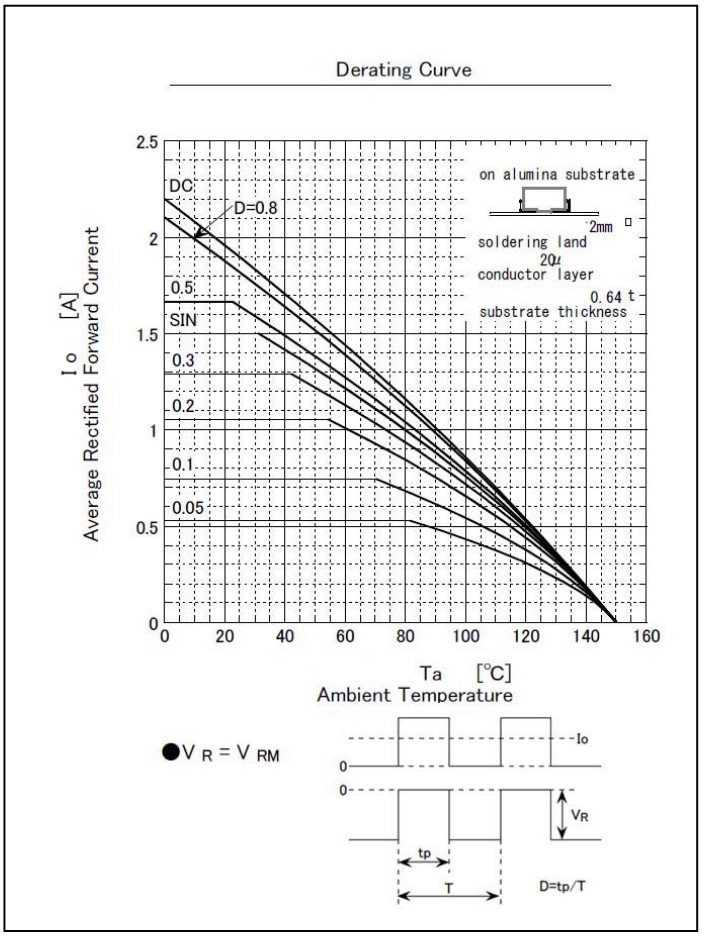
※ ：See the original Specifications

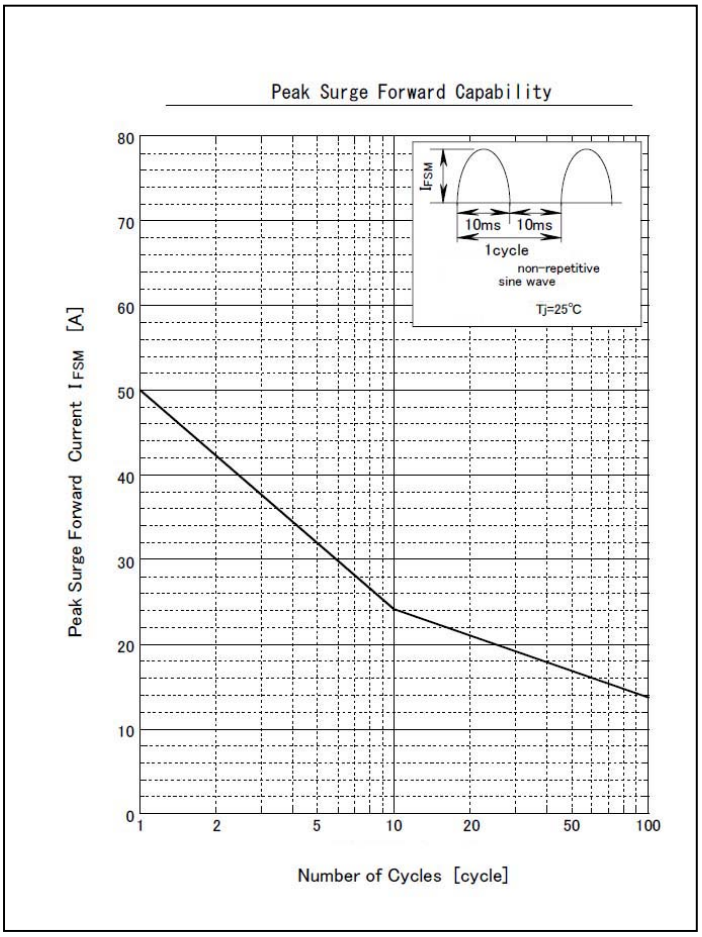
CHARACTERISTIC DIAGRAMS

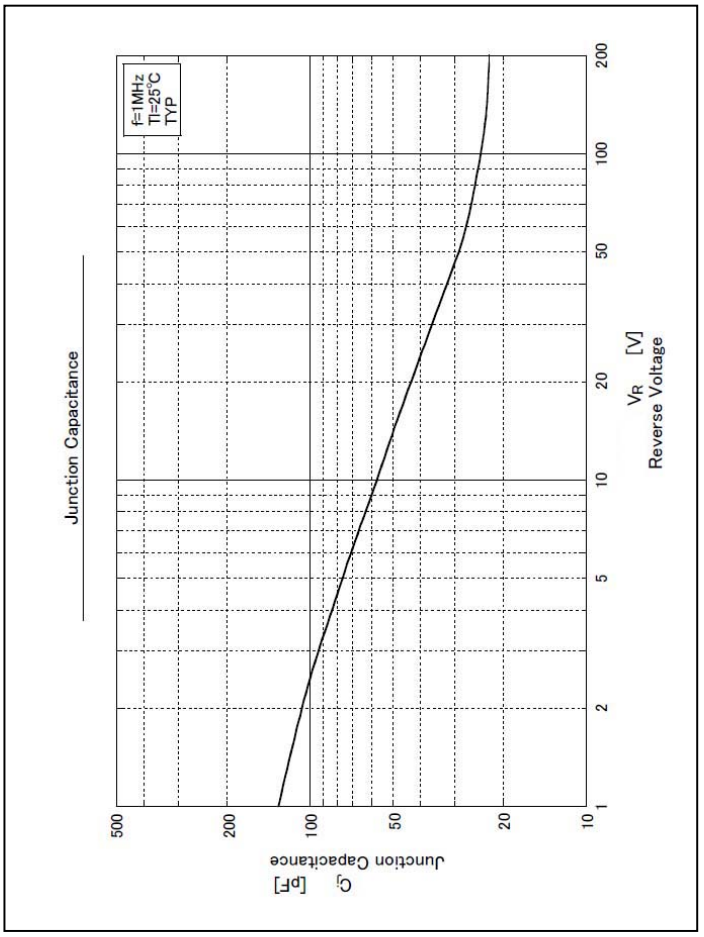









Peak Surge Forward Capability
Peak Surge Forward Current IFSM [A]
Number of Cycles [cycle]
IFSM
10ms 10ms
1cycle
non-repetitive
sine wave
Tj=25℃


f=1MHz
TI=25℃
TYP
Junction Capacitance
Junction Capacitance
CJ [pF]
VR [V]
Reverse Voltage

Outline Dimensions

unit:mm

B6

JEDEC Code	DO-214AA similar
JEITA Code	–
House Name	M2F

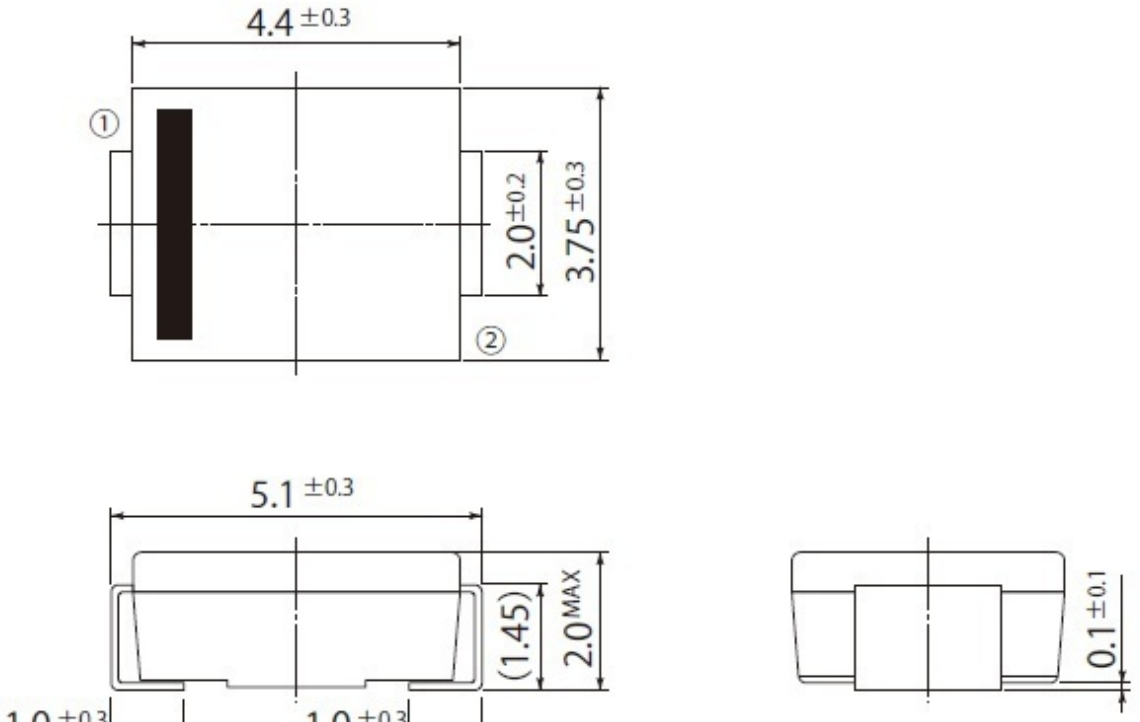
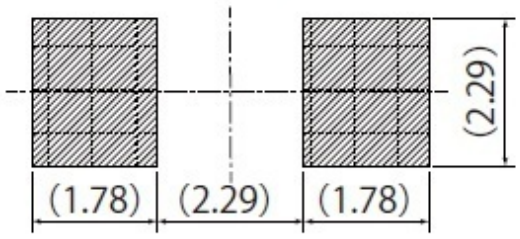


Fig. B6-1



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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   【Standard applications】
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   【Special applications】
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   【Specific applications】
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