

# M2FH3

## Schottky Barrier Diodes

30V, 6A

### Feature

- Small SMD
- High Recovery Speed
- Low  $V_F$
- Pb free terminal
- RoHS:Yes

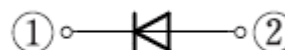
### OUTLINE

Package (House Name): M2F

Package (JEDEC Code): DO-214AA similar



### Equivalent circuit



### Absolute Maximum Ratings (unless otherwise specified : $T_c=25^\circ\text{C}$ )

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	$T_{stg}$		-55 to 125	$^\circ\text{C}$
Junction temperature	$T_j$		-55 to 125	$^\circ\text{C}$
Repetitive peak reverse voltage	$V_{RRM}$		30	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, $T_c=70^\circ\text{C}$ ※	6	A
Surge forward current	$I_{FSM}$	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, $T_j=25^\circ\text{C}$	110	A

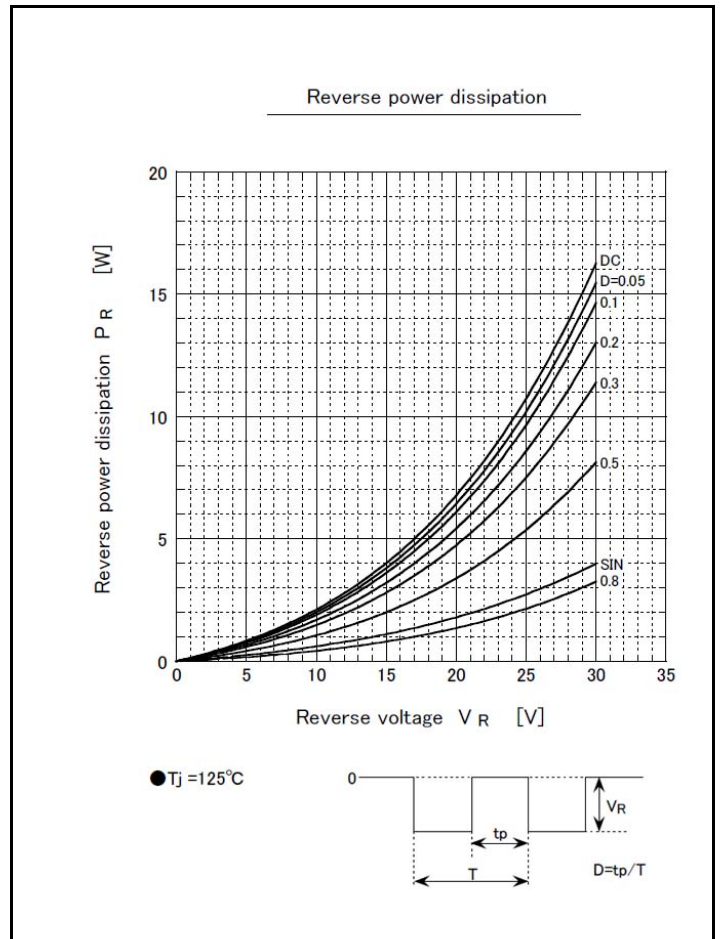
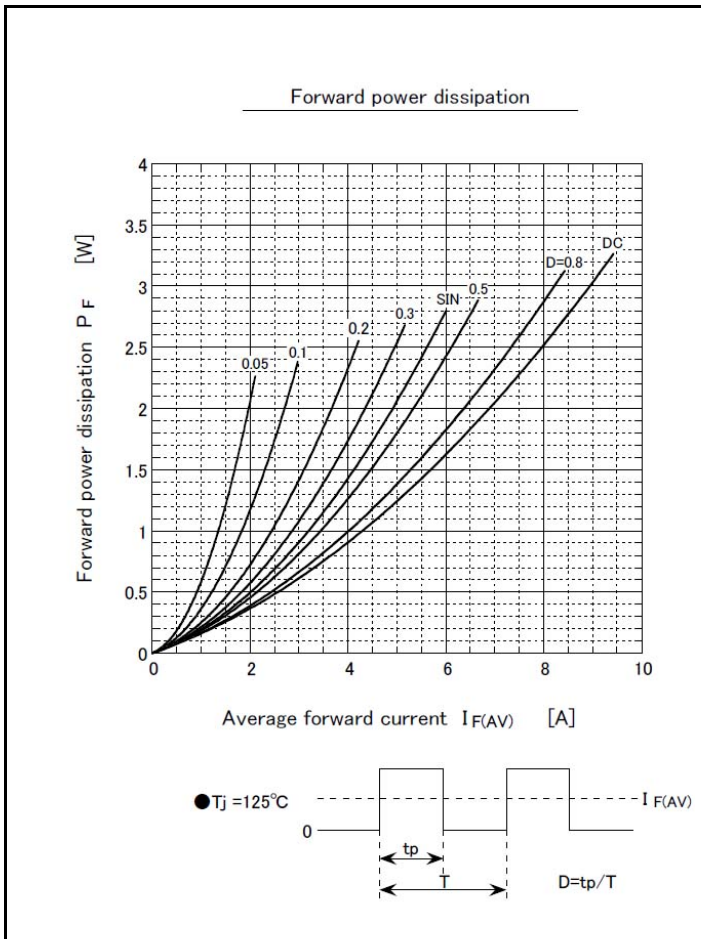
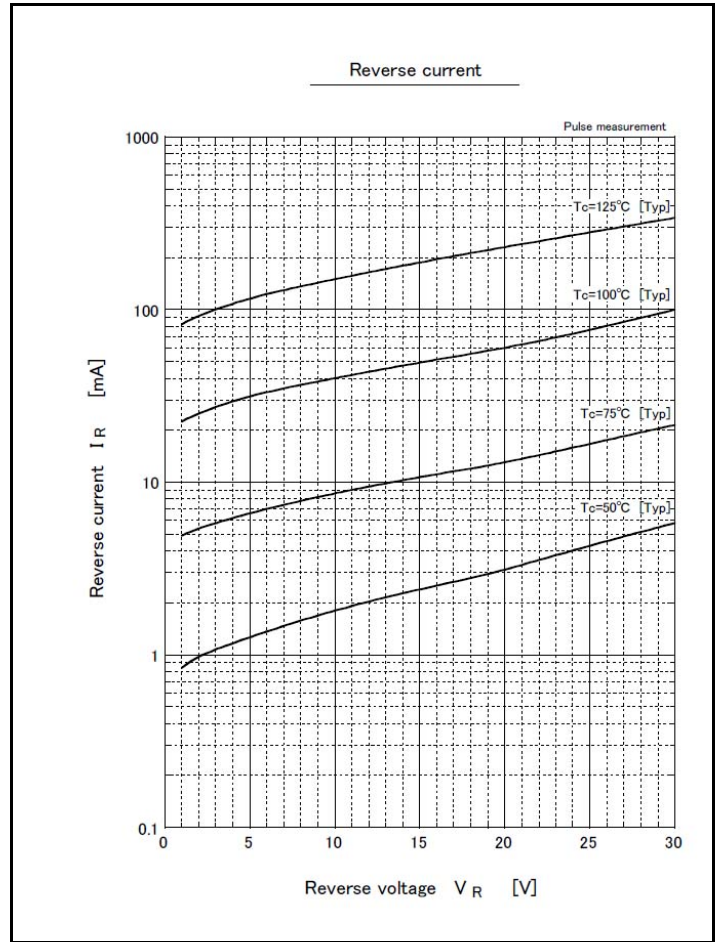
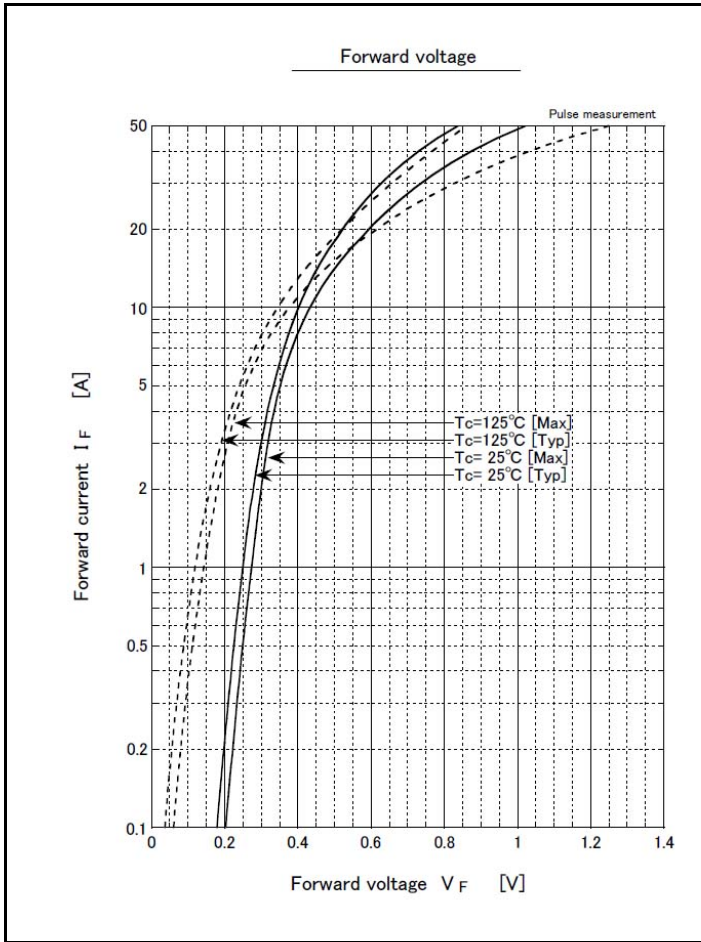
※ : See the original Specifications

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

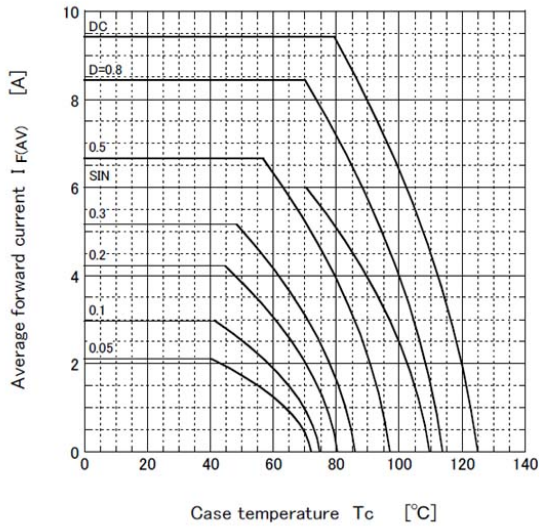
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	IF=6.0A, Pulse measurement			0.36	V
Forward voltage	$V_F$	IF=2.0A, Pulse measurement			0.3	V
Reverse current	$I_R$	VR=30V, Pulse measurement			4	mA
Total capacitance	Ct	f=1MHz, VR=10V		240		pF
Thermal resistance	Rth(j-c)	Junction to case, On glass-epoxy substrate ※			14	°C/W
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate ※			16	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			55	°C/W

※ :See the original Specifications

# CHARACTERISTIC DIAGRAMS



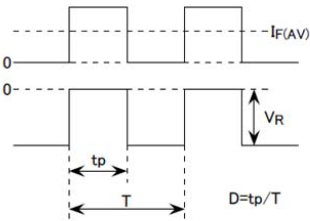
Derating curve



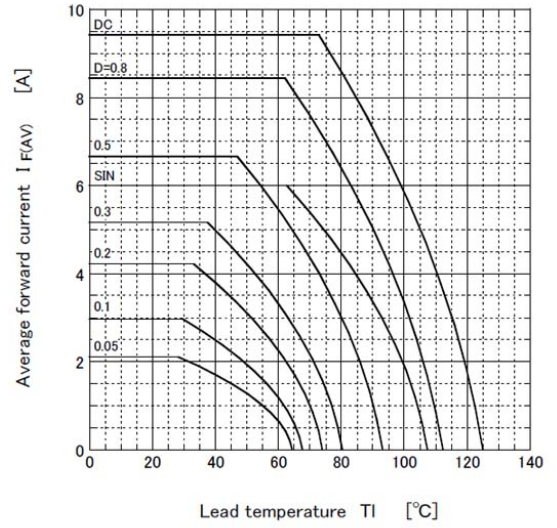
●  $V_R = 15V$   
R-load  
Free in air

● Substrate detail

Type	Glass-epoxy
Size	2 inch <sup>2</sup>
Thickness	1mm
Conductor thickness	35 $\mu$ m
Pattern area	2320mm <sup>2</sup>



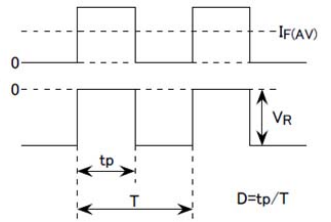
Derating curve



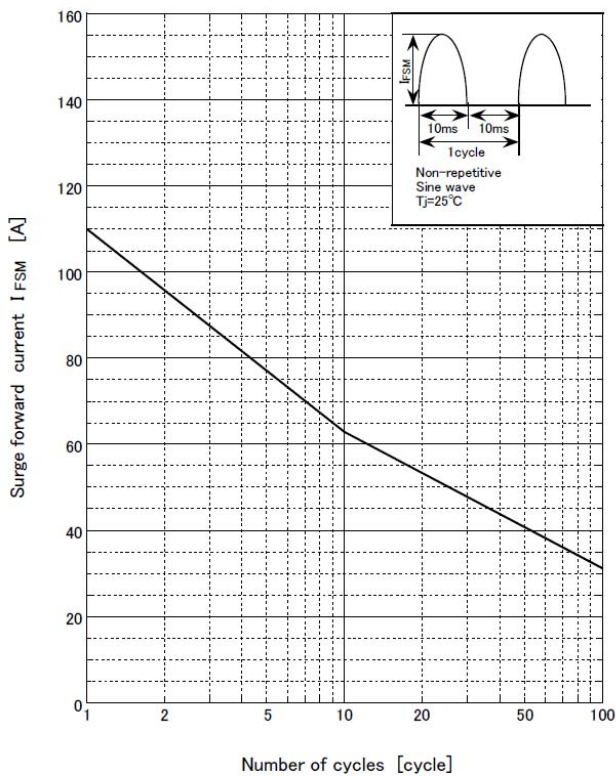
●  $V_R = 15V$   
R-load  
Free in air

● Substrate detail

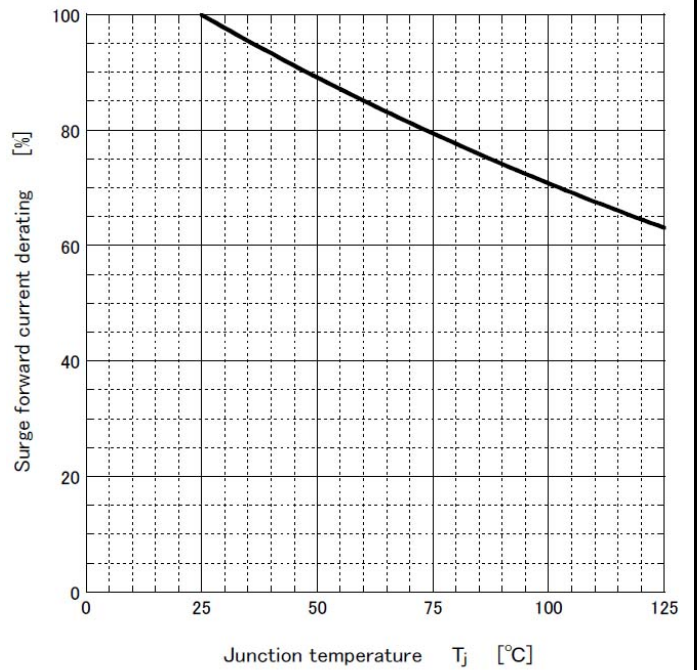
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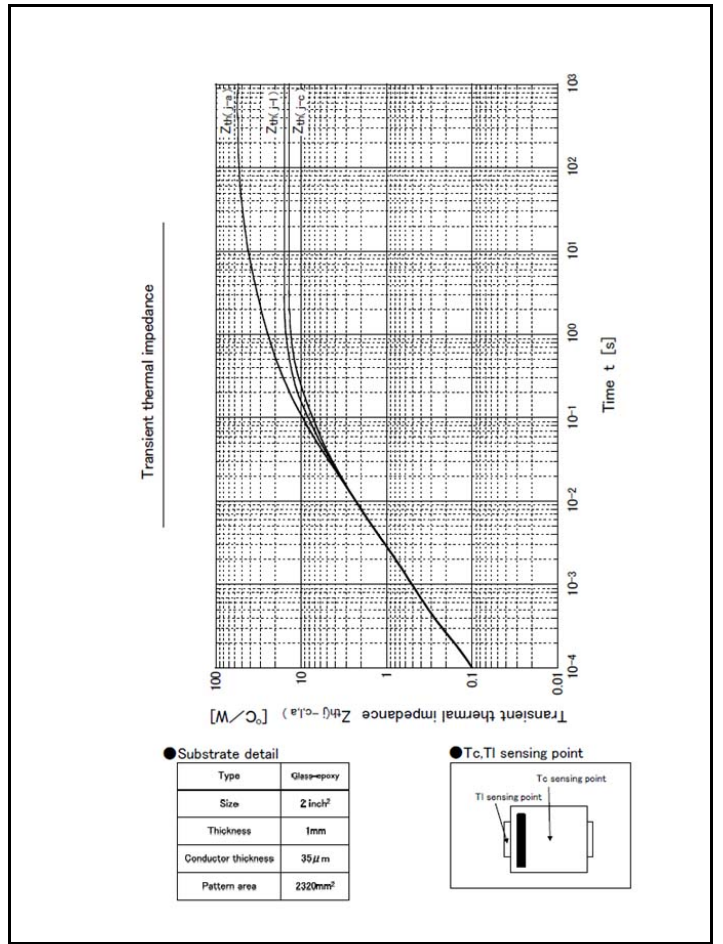
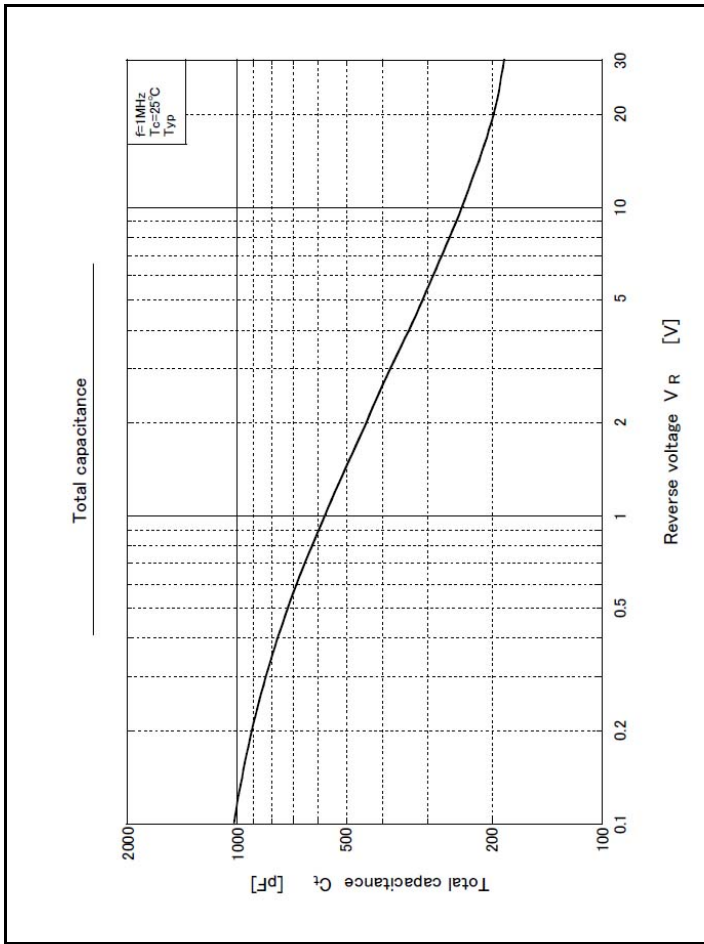


Surge forward current capability



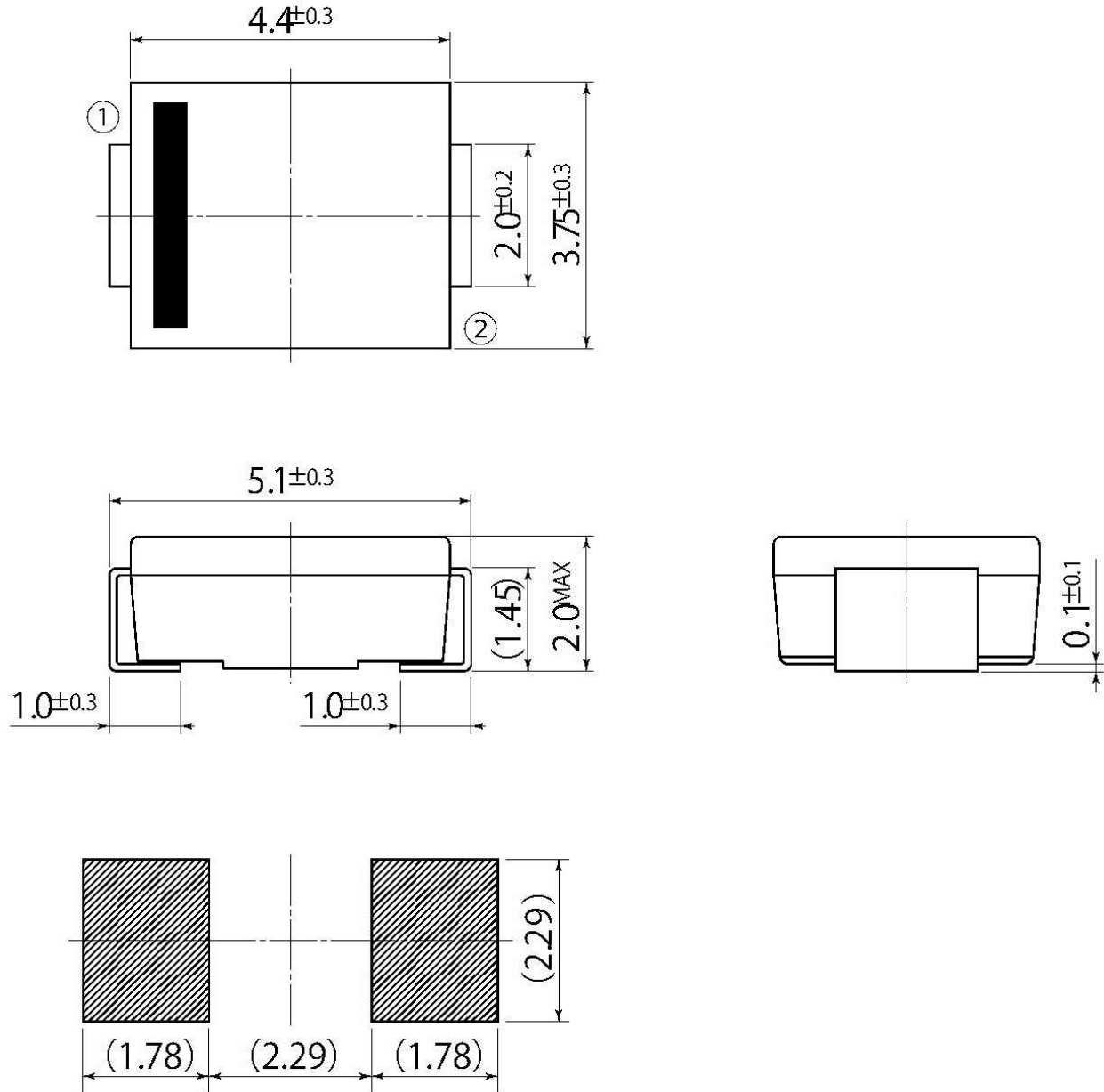
Surge forward current derating vs Junction temperature





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



Referential Soldering Pad

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