

# KU10S31NS

Thyristor Surge Suppressors  
275V, 100A

## Feature

- Bi-directional characteristic
- High-speed response characteristic
- Large surge current capacity
- Capable of repeated use for surges
- UL497B File No.E183905
- Pb free terminal
- RoHS:Yes

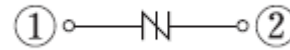
## OUTLINE

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 <sub>stg</sub>		-40 to 125	°C
Junction temperature	T <sub>j</sub>		125	°C
Repetitive peak reverse voltage	V <sub>DRM</sub>		275	V
Peak surge on-state current	I <sub>TSM</sub>	10/1000μs, Non-repetitive	100	A

\* :See the original Specifications

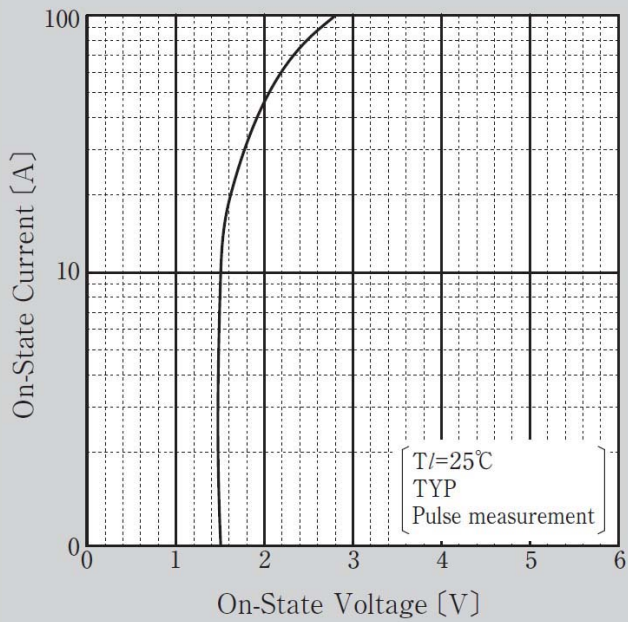
## Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Clamping voltage	V <sub>CL</sub>	dV/dt=100V/μs			420	V
Off-state current	I <sub>DSM</sub>	VD=275V			5	μA
Holding current	I <sub>H</sub>	Pulse measurement	100			mA
On-State Voltage	V <sub>T</sub>	IT=2.0A			5	V
Junction capacitance	C <sub>j</sub>	f=100kHz, VD=50V, OSC=1Vrms			90	pF

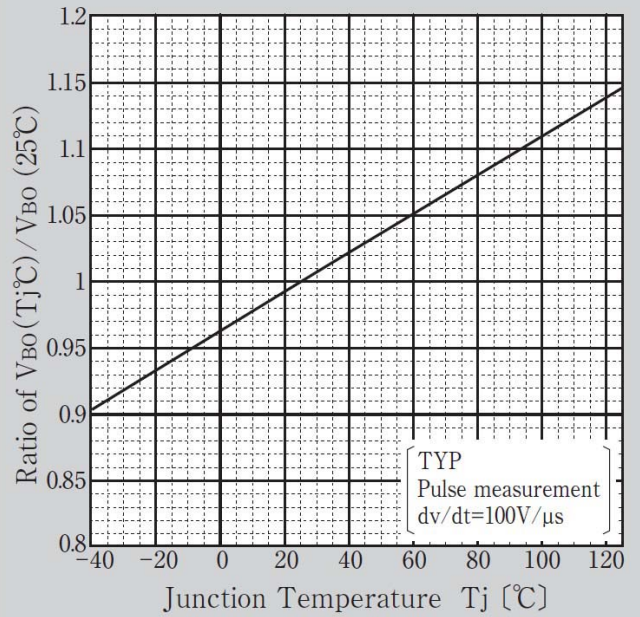
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

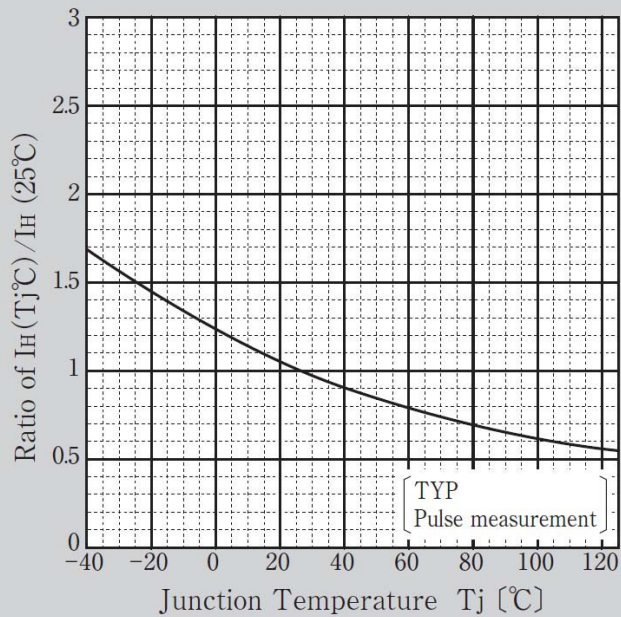
### On-State Voltage-On-State Current



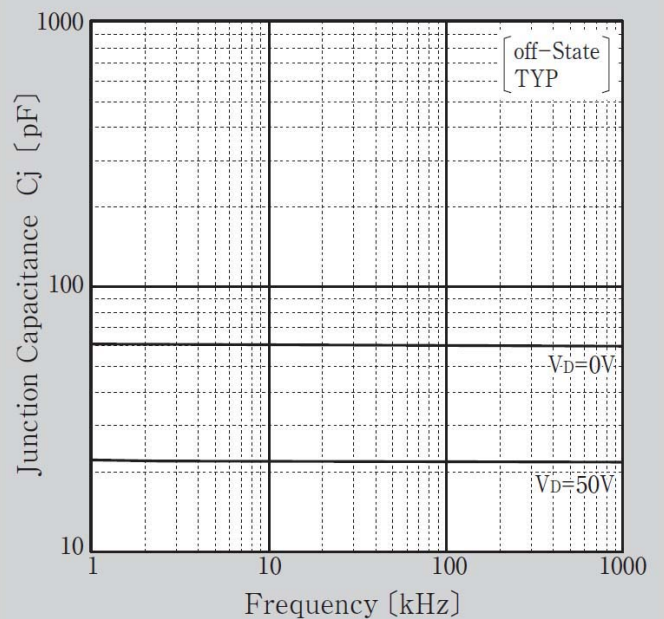
### Breakover Voltage vs Junction Temperature



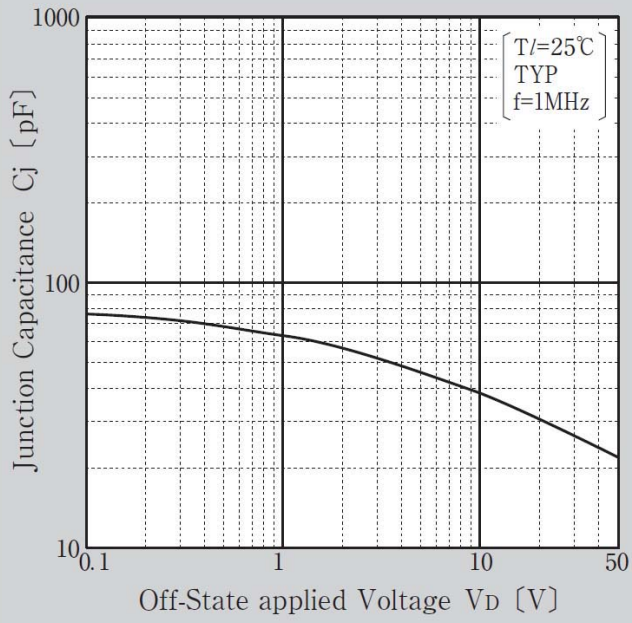
### Holding Current vs Junction Temperature



### Junction Capacitance

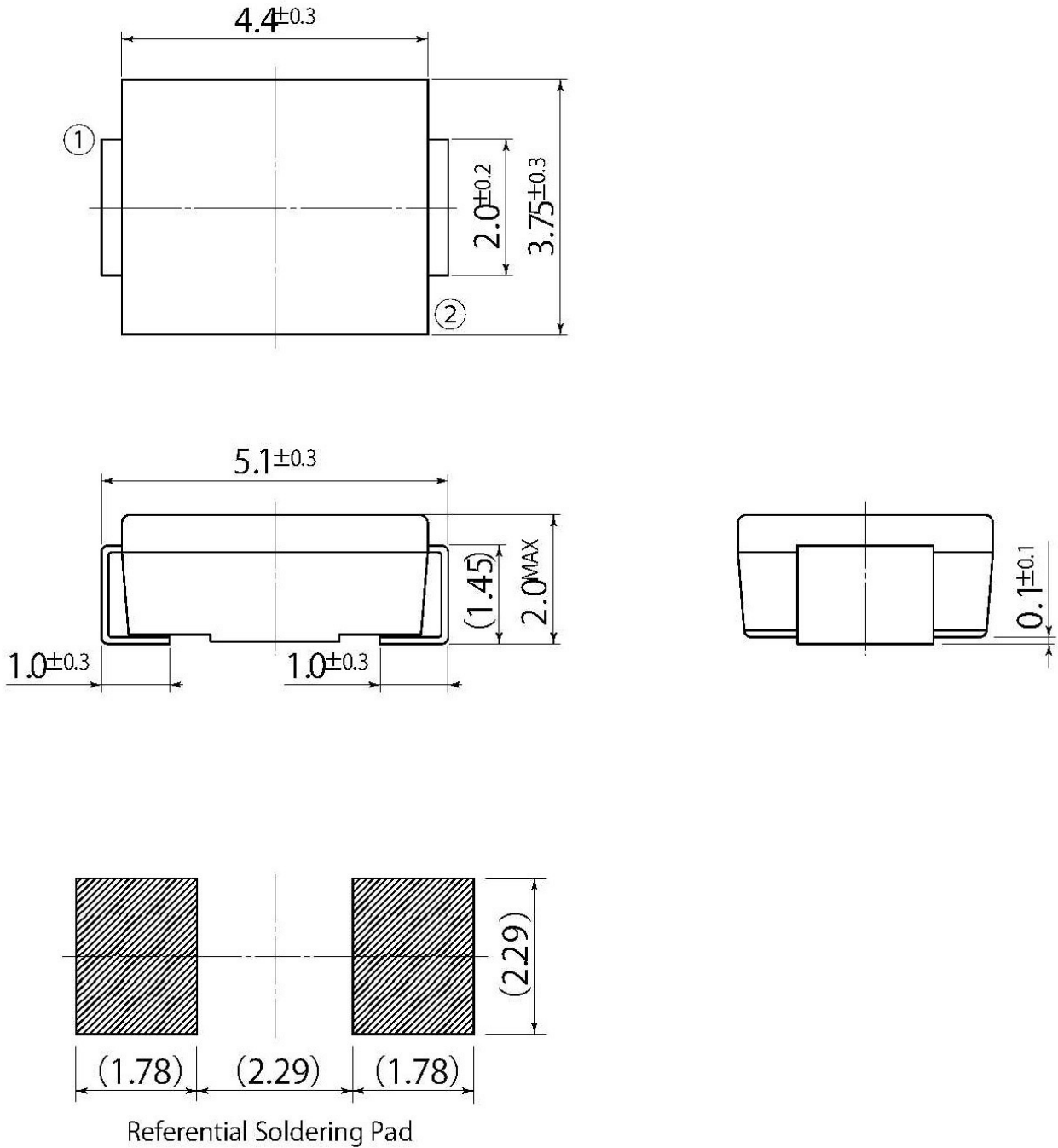


### Junction Capacitance



B7

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



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

## Notes

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