ShinDengen

M1FJ4

Schottky Barrier Diodes
40V, 1.5A

Feature

- Small SMD
- High Recovery Speed
- Low I_R
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): M1F
Package (JEDEC Code): DO-219AA similar

Equivalent circuit

Absolute Maximum Ratings (unless otherwise specified : Tl=25℃)

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	℃
Junction temperature	Tj		-55 to 150	℃
Repetitive peak reverse voltage	V_{RRM}		40	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On alumina substrate, Ta=31℃ ※	1.5	A
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=31℃ ※	1	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25℃	30	A

※ :See the original Specifications

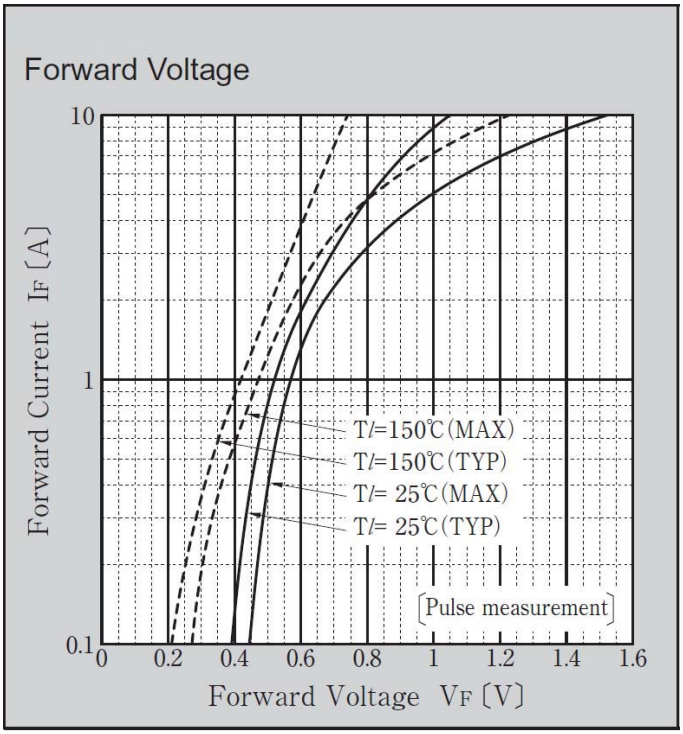
Electrical Characteristics (unless otherwise specified : Tl=25℃)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=1.5A, Pulse measurement			0.63	V
Forward voltage	V_F	IF=1.0A, Pulse measurement			0.57	V
Reverse current	I_R	VR=40V, Pulse measurement			0.05	mA
Total capacitance	Ct	f=1MHz, VR=10V		65		pF
Thermal resistance	Rth(j-l)	Junction to lead			20	℃/W
Thermal resistance	Rth(j-a)	Junction to ambient, On alumina substrate ※			108	℃/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			186	℃/W

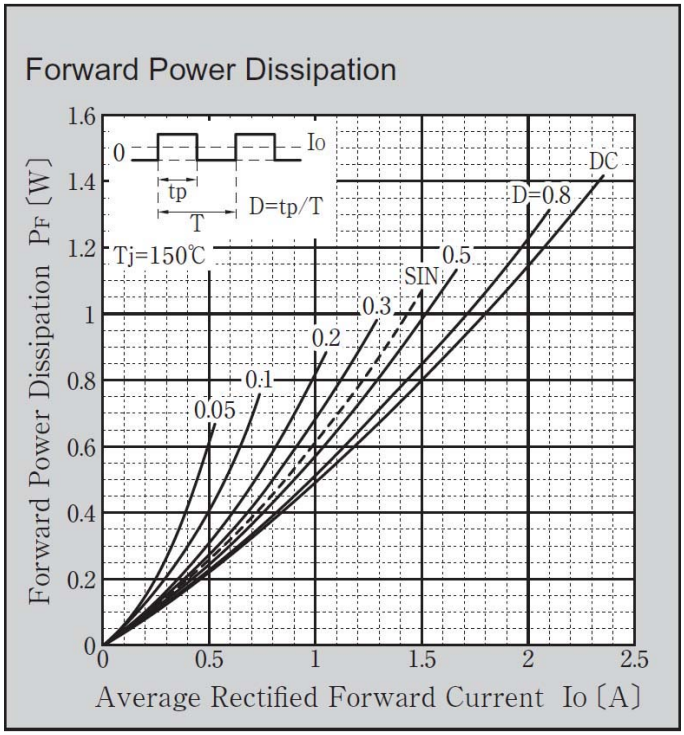
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

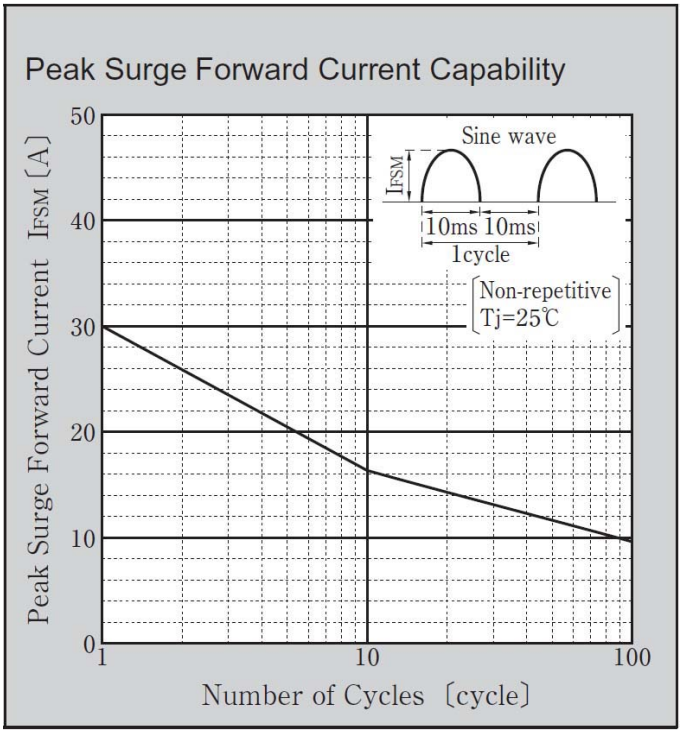
Forward Voltage



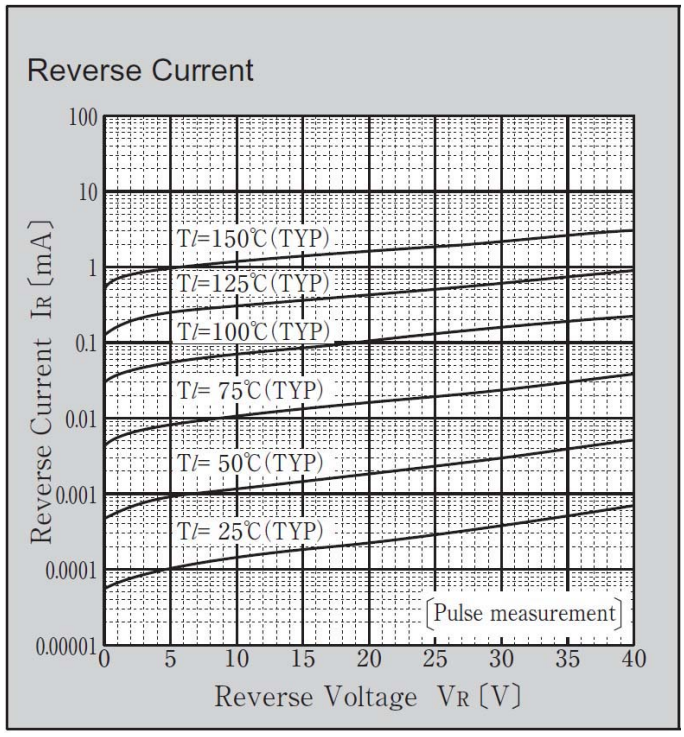
Forward Power Dissipation



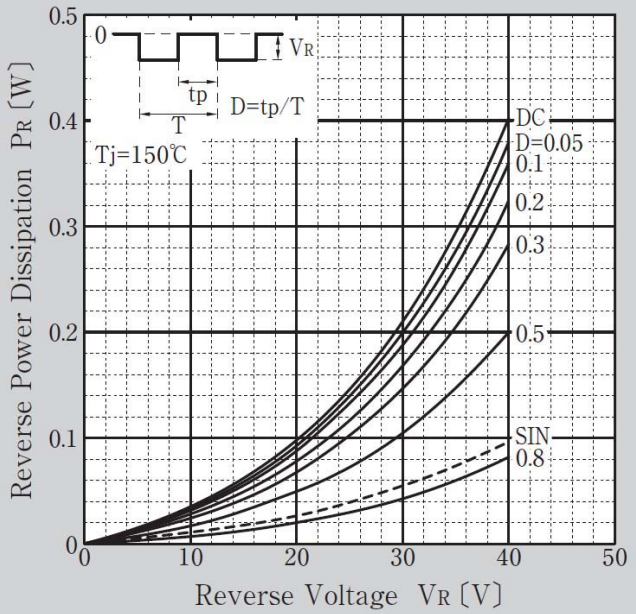
Peak Surge Forward Current Capability



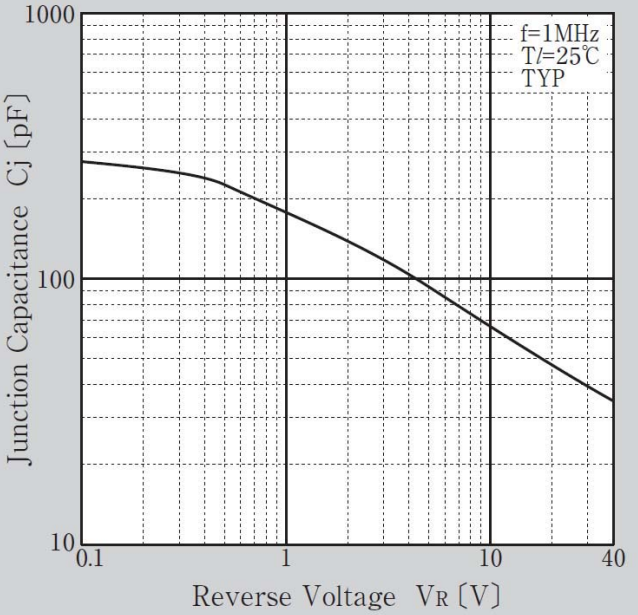
Reverse Current



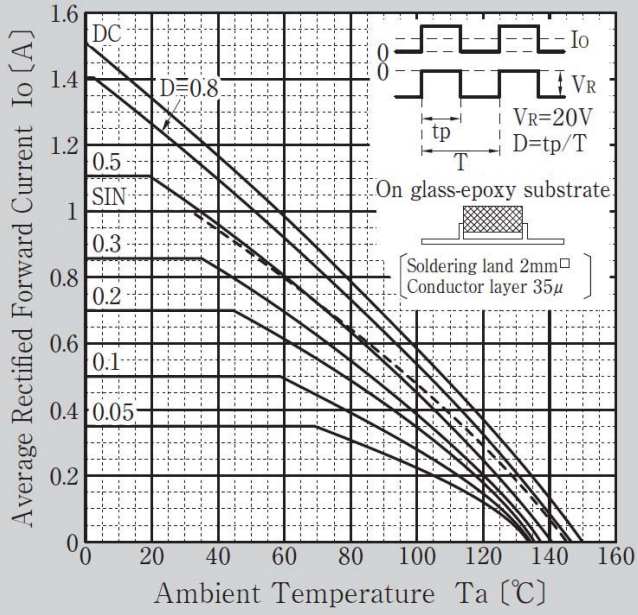
Reverse Power Dissipation



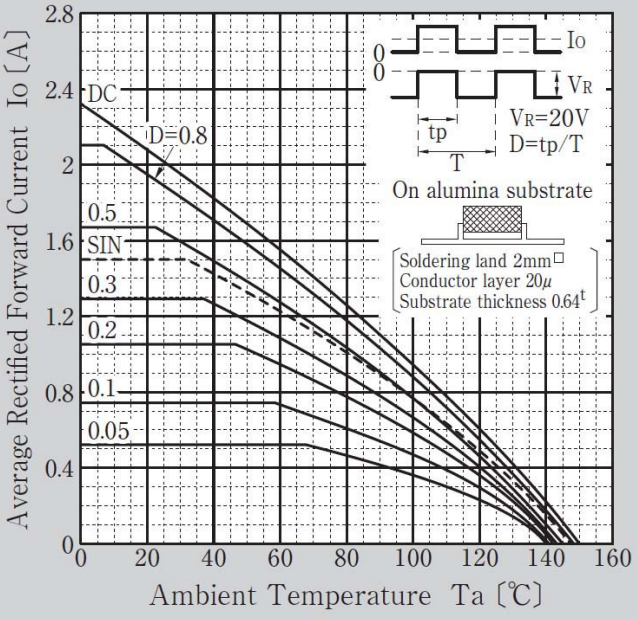
Junction Capacitance



Derating Curve



Derating Curve



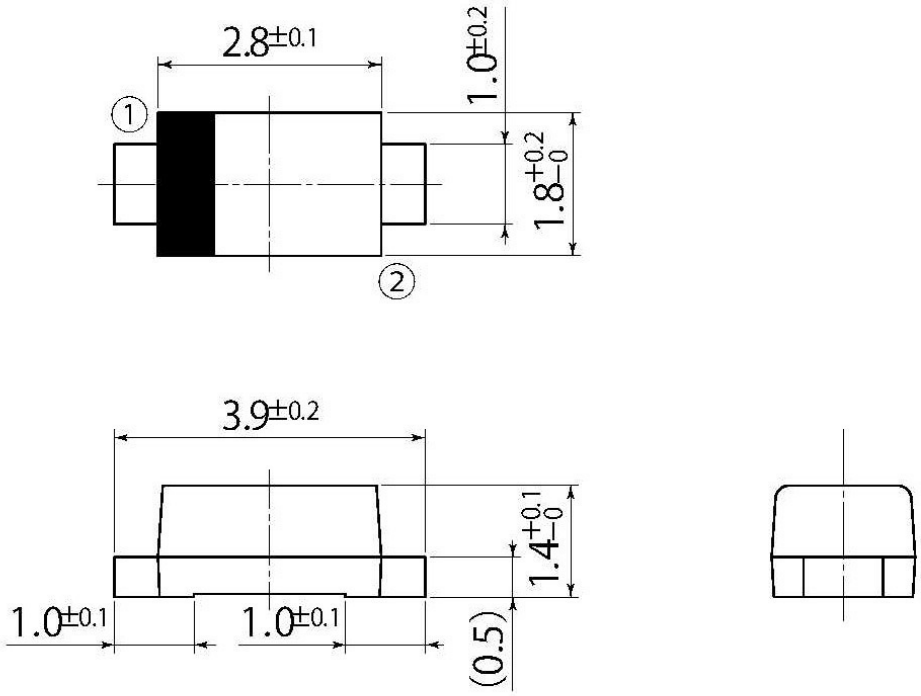
Outline Dimensions

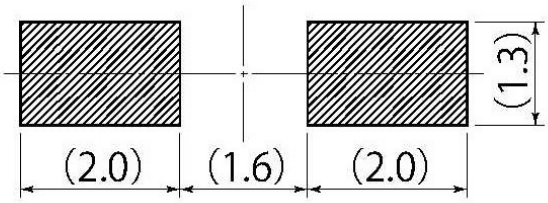
unit:mm

scale: 10/1

B2

JEDEC Code	DO-219AA similar
JEITA Code	–
House Name	M1F





Referential Soldering Pad

・Optimize soldering pad to the board design and soldering condi tion.

Notes

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