

M1FE40
General Rectifying Diodes
400V, 2.0A

Feature

- Small SMD
- High ESD Capability
- 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°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	V _{RRM}		400	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On glass-epoxy substrate, Tc=103°C ※	2	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=63°C ※	1	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	25	A

※ :See the original Specifications

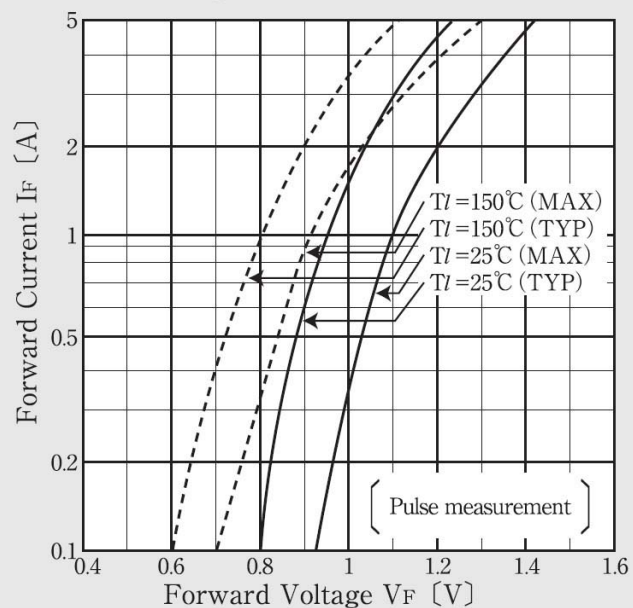
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=1A$, Pulse measurement			1.1	V
Reverse current	I_R	$V_R=400V$, Pulse measurement			10	μA
Thermal resistance	$R_{th(j-c)}$	Junction to case, On alumina substrate ※			18	°C/W
Thermal resistance	$R_{th(j-l)}$	Junction to lead			20	°C/W
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate ※			80	°C/W

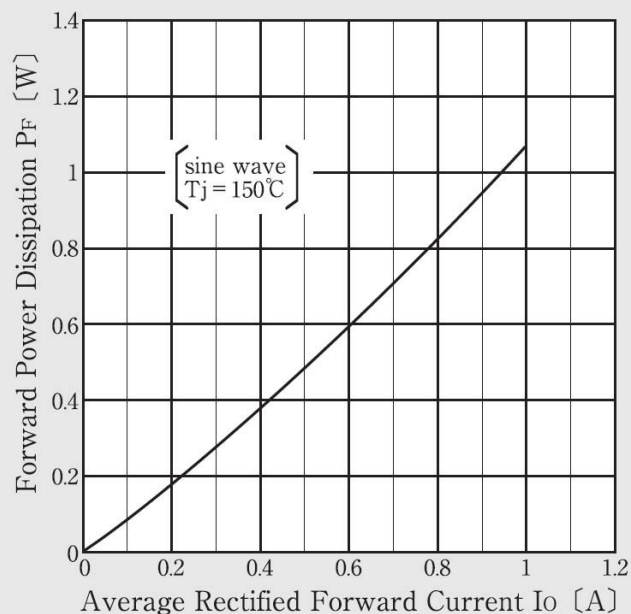
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

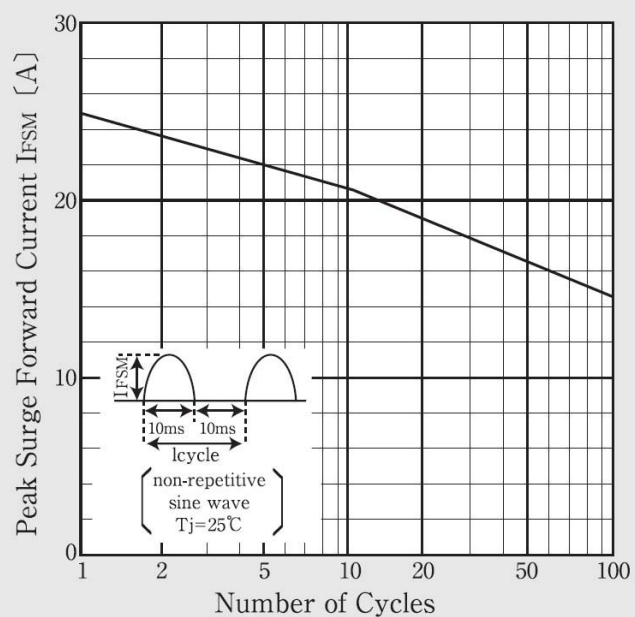
Forward Voltage



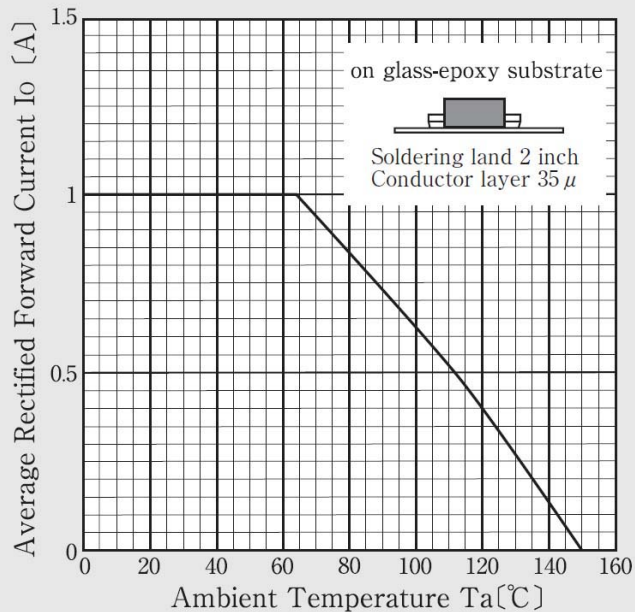
Forward Power Dissipation

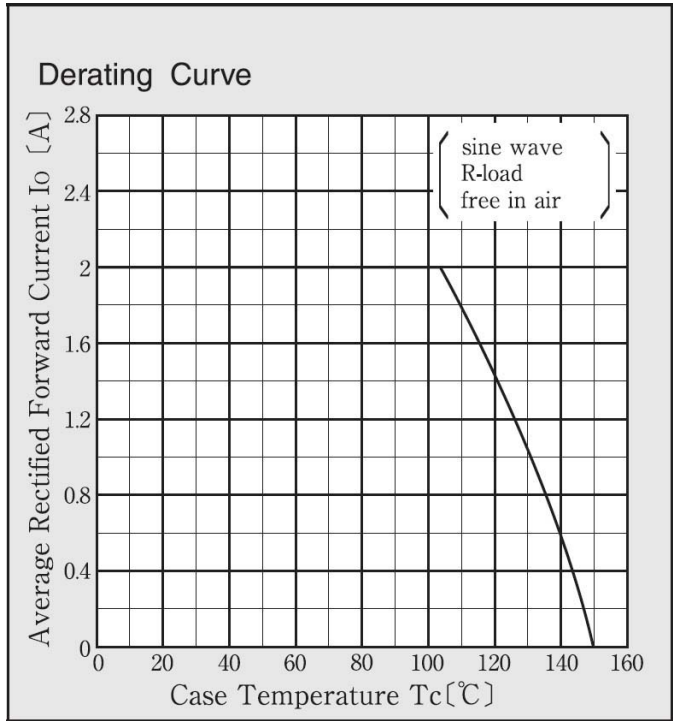


Peak Surge Forward Current Capability



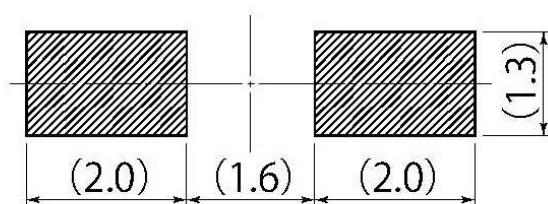
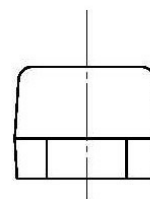
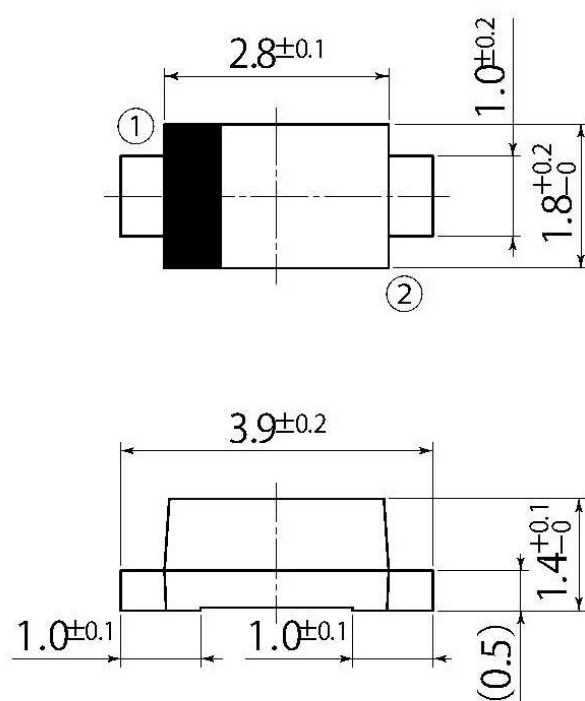
Derating Curve





B2

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



Referential Soldering Pad

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

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