

# M3F60

## General Rectifying Diodes

600V, 3.0A

### Feature

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

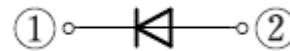
### OUTLINE

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 temperature	T <sub>stg</sub>		-55 to 150	°C
Junction temperature	T <sub>j</sub>		-55 to 150	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		600	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, Tl=100°C	3	A
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※	2.3	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	90	A
Current squared time	I <sup>2</sup> t	1ms ≤ tp < 10ms, Tj=25°C	40	A <sup>2</sup> s

※ :See the original Specifications

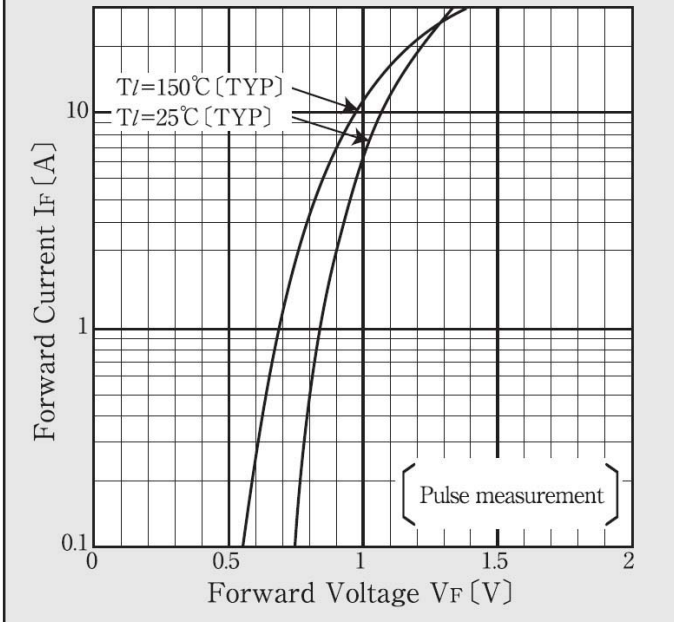
**Electrical Characteristics** (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	$I_F=3A$ , Pulse measurement			1.05	V
Reverse current	$I_R$	$V_R=600V$ , Pulse measurement			10	$\mu A$
Total capacitance	$C_t$	$f=1MHz$ , $V_R=10V$		23		pF
Thermal resistance	$R_{th(j-l)}$	Junction to lead			16	$^{\circ}C/W$
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate *			55	$^{\circ}C/W$

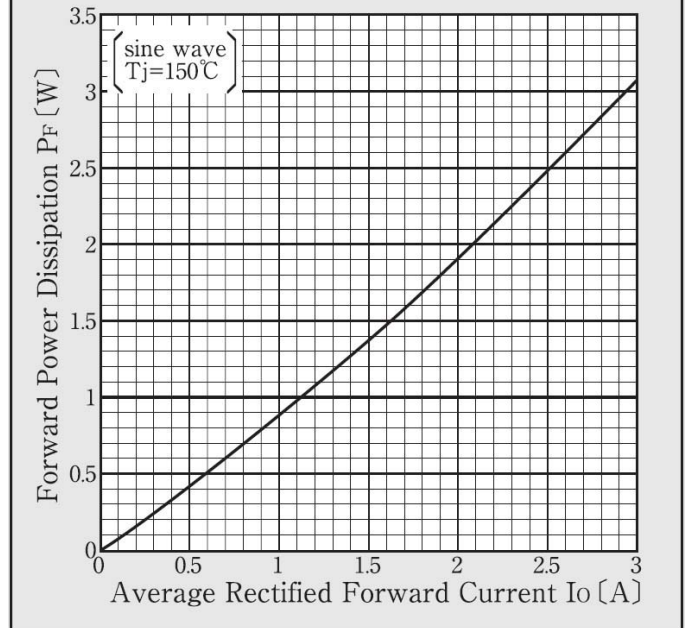
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

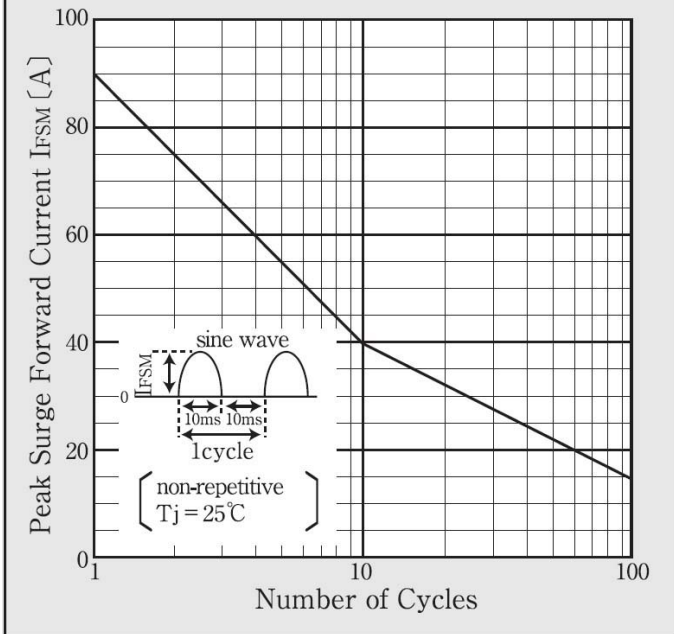
### Forward Voltage



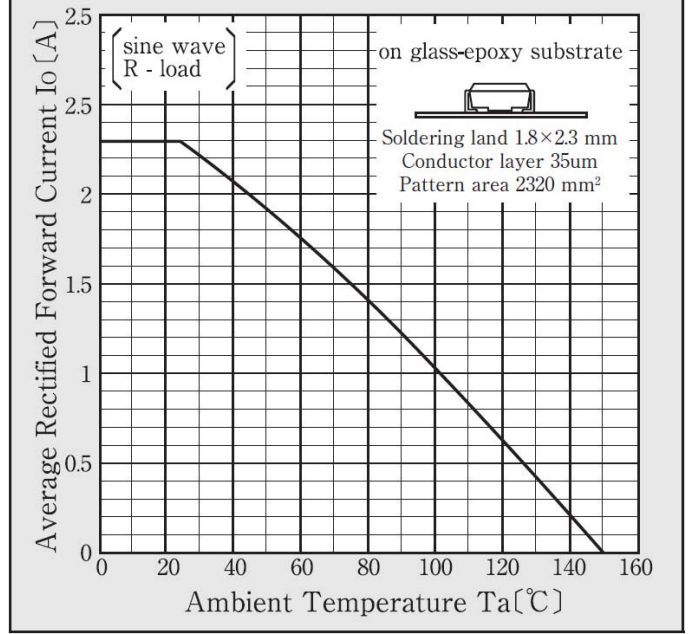
### Forward Power Dissipation



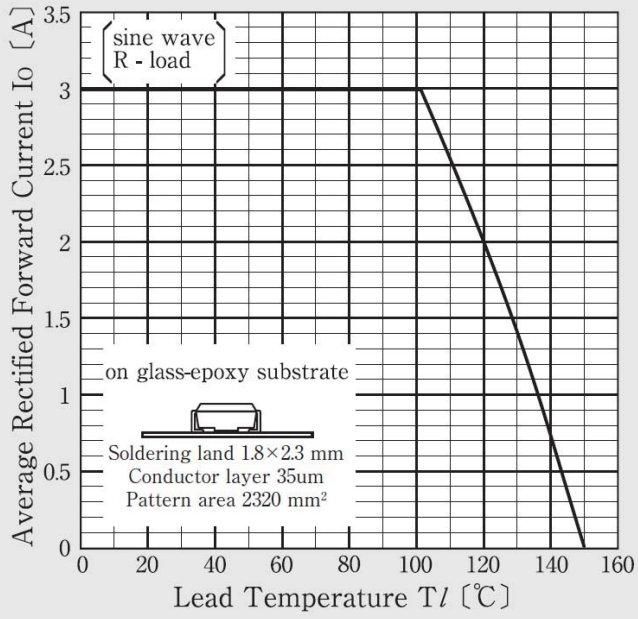
### Peak Surge Forward Current Capability



### Derating Curve

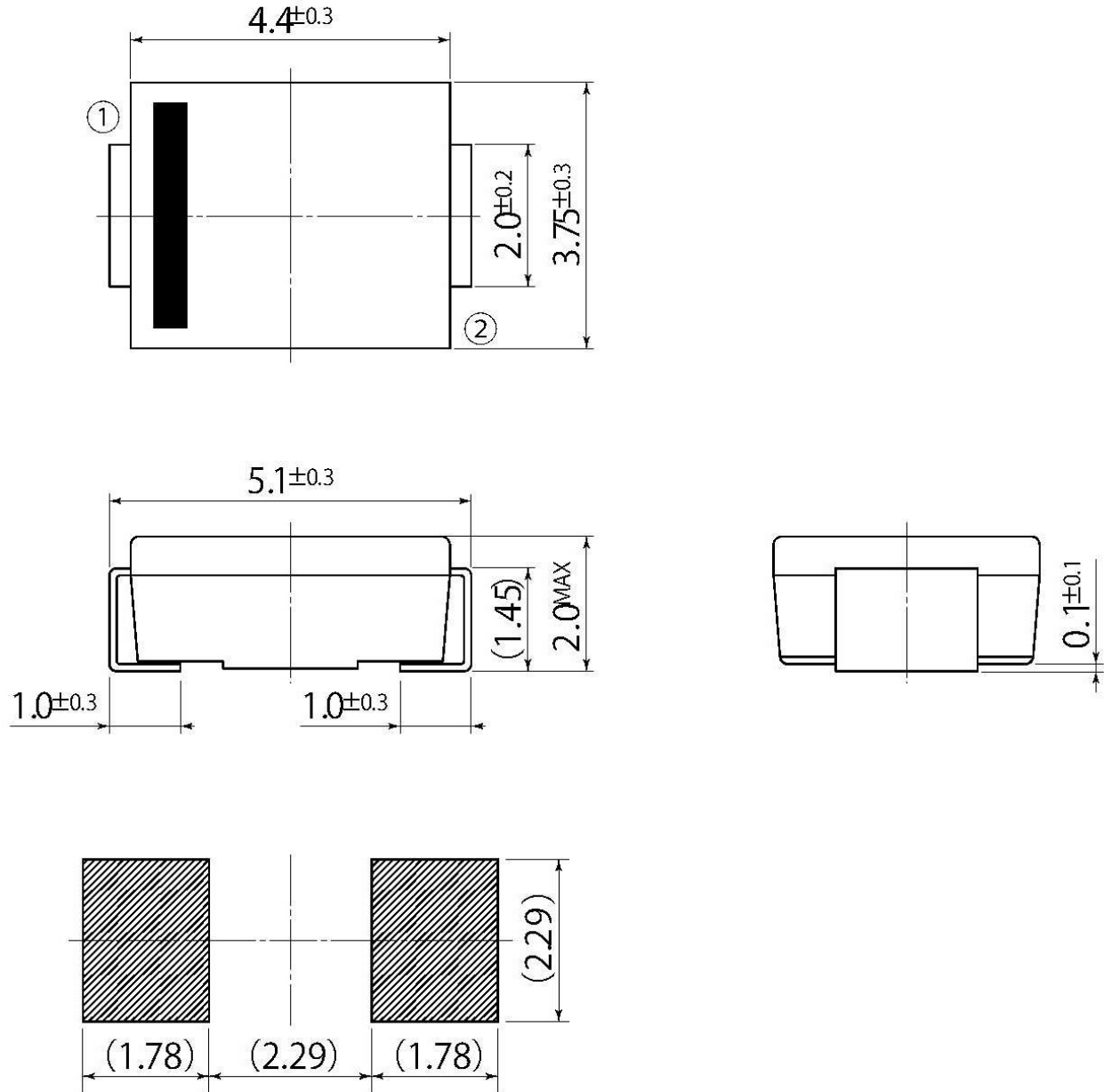


### Derating Curve



B6

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



Referential Soldering Pad

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