

# D1FM3

## Schottky Barrier Diodes

30V, 5A

### Feature

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

### OUTLINE

Package (House Name): 1F

Package (JEDEC Code): DO-214AC



### 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 150	$^\circ\text{C}$
Junction temperature	$T_j$		-55 to 150	$^\circ\text{C}$
Repetitive peak reverse voltage	$V_{RRM}$		30	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, On glass-epoxy substrate, $T_a=83^\circ\text{C}$ ※	5	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, On glass-epoxy substrate, $T_a=25^\circ\text{C}$ ※	3	A
Surge forward current	$I_{FSM}$	50Hz sine wave, Non-repetitive, 1cycle, Peak value, $T_j=25^\circ\text{C}$	90	A

※ :See the original Specifications

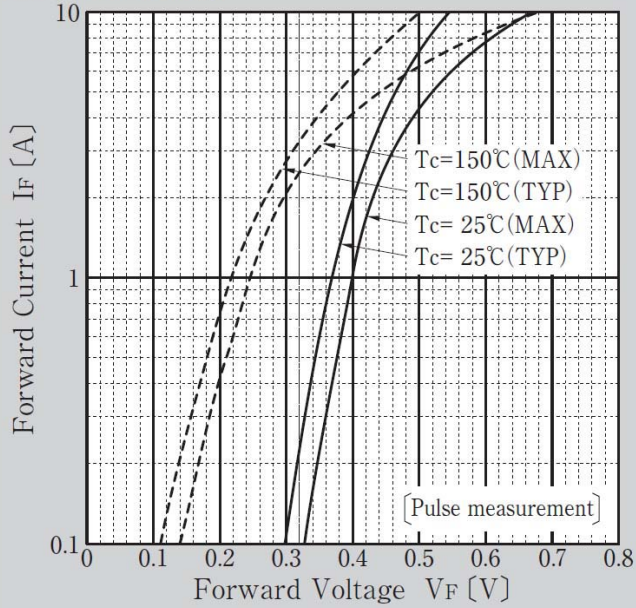
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =3.0A, Pulse measurement			0.46	V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =1.0A, Pulse measurement			0.4	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =30V, Pulse measurement			0.1	mA
Total capacitance	C <sub>t</sub>	f=1MHz, V <sub>R</sub> =10V		130		pF
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case ※			16	°C/W
Thermal resistance	R <sub>th(j-l)</sub>	Junction to lead, On glass-epoxy substrate ※			18	°C/W
Thermal resistance	R <sub>th(j-a)</sub>	Junction to ambient, On glass-epoxy substrate ※			65	°C/W

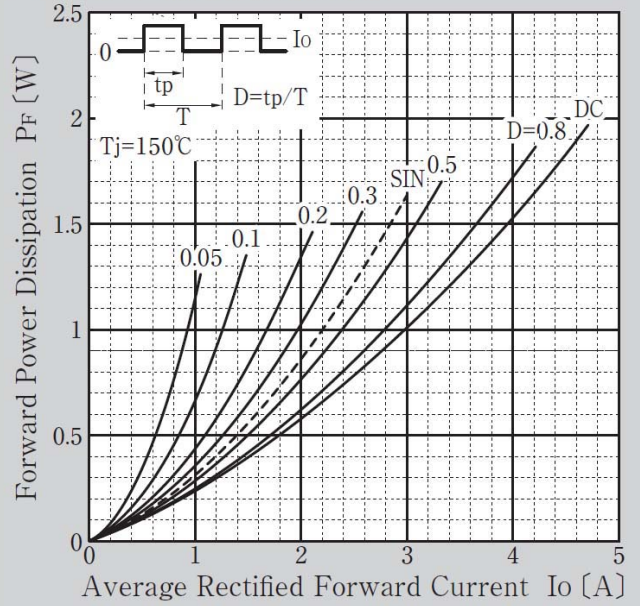
※ :See the original Specifications

# CHARACTERISTIC DIAGRAMS

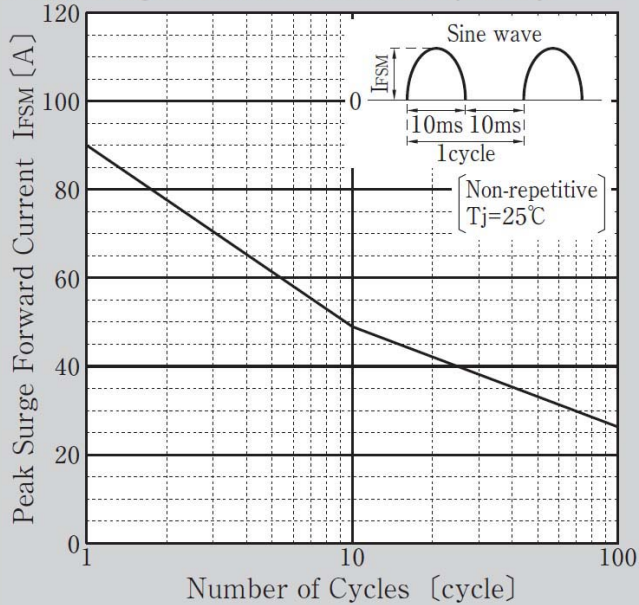
### Forward Voltage



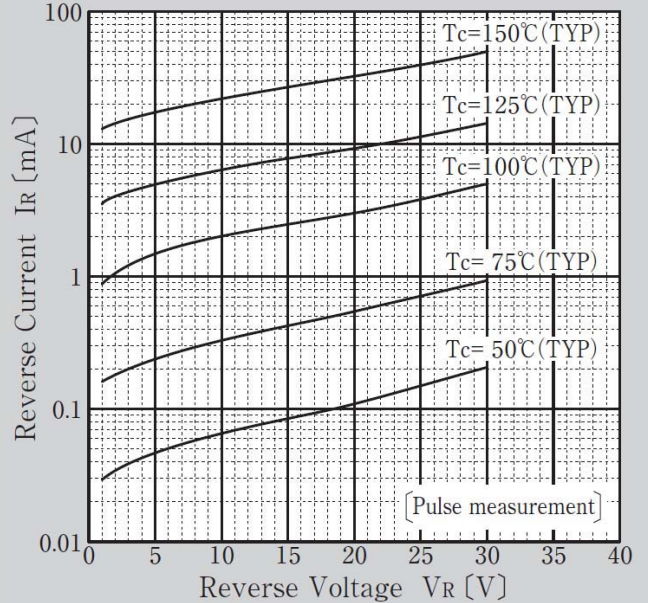
### Forward Power Dissipation

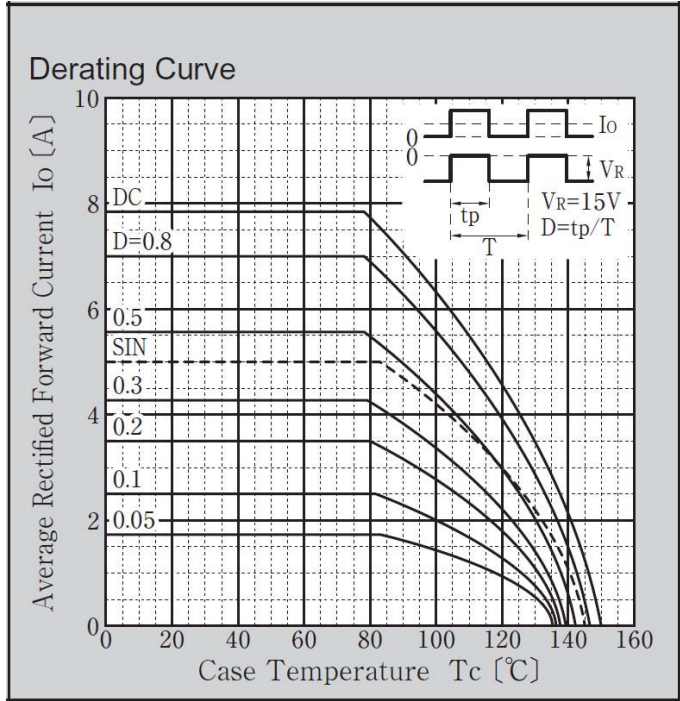
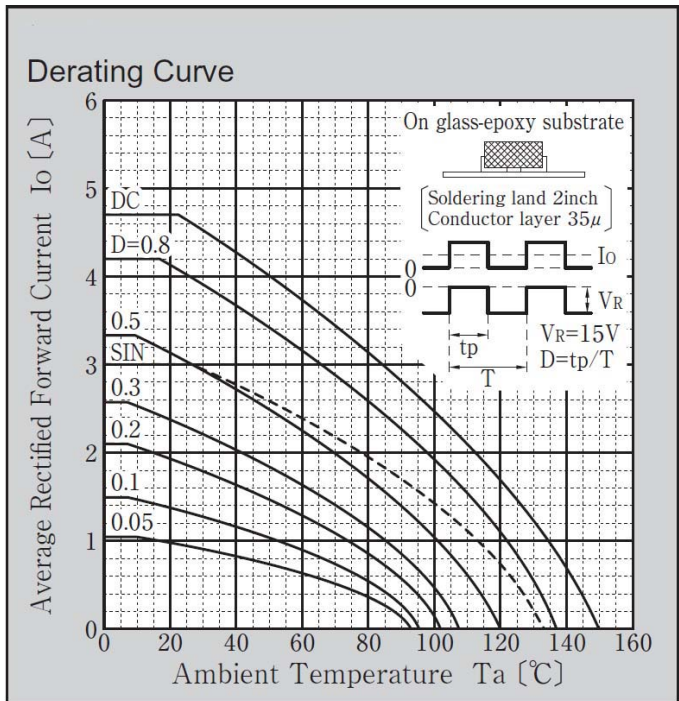
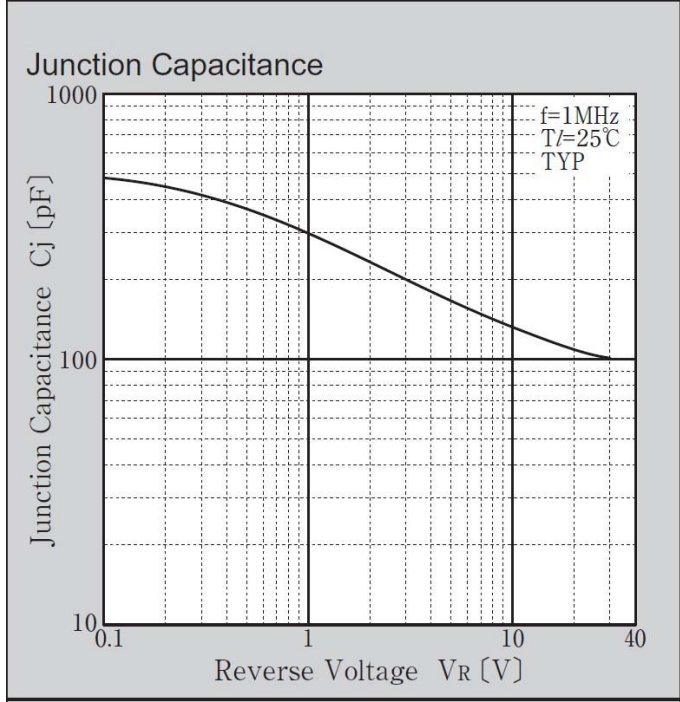
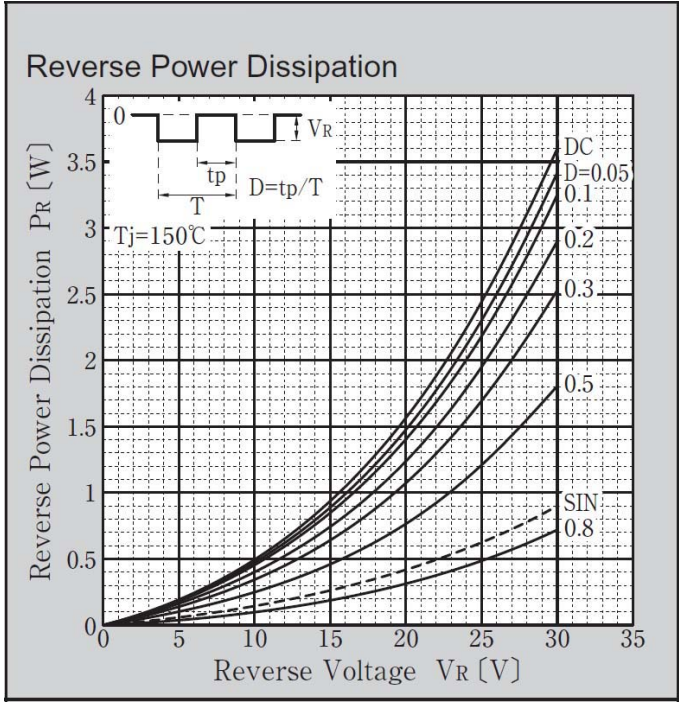


### Peak Surge Forward Current Capability



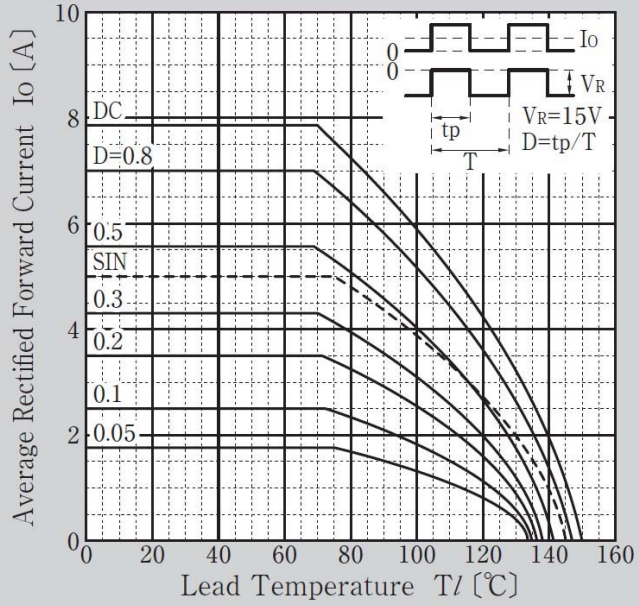
### Reverse Current



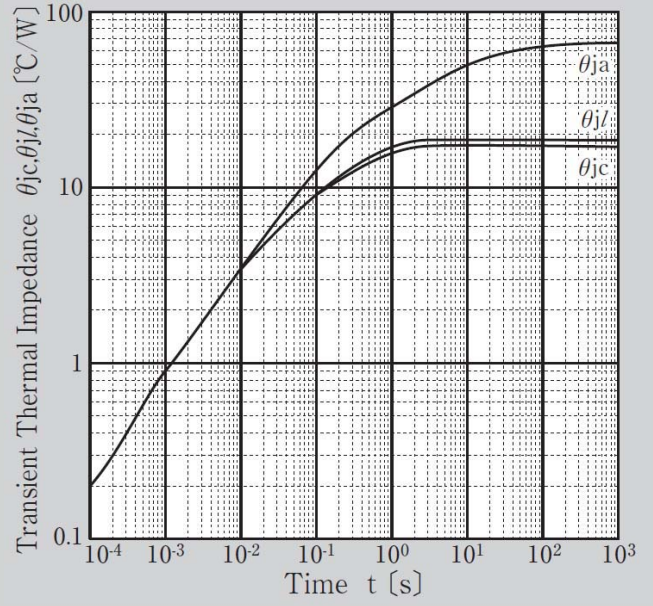




Derating Curve

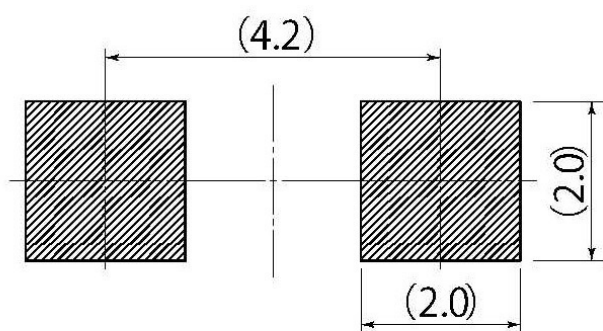
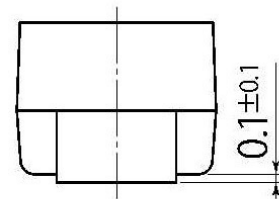
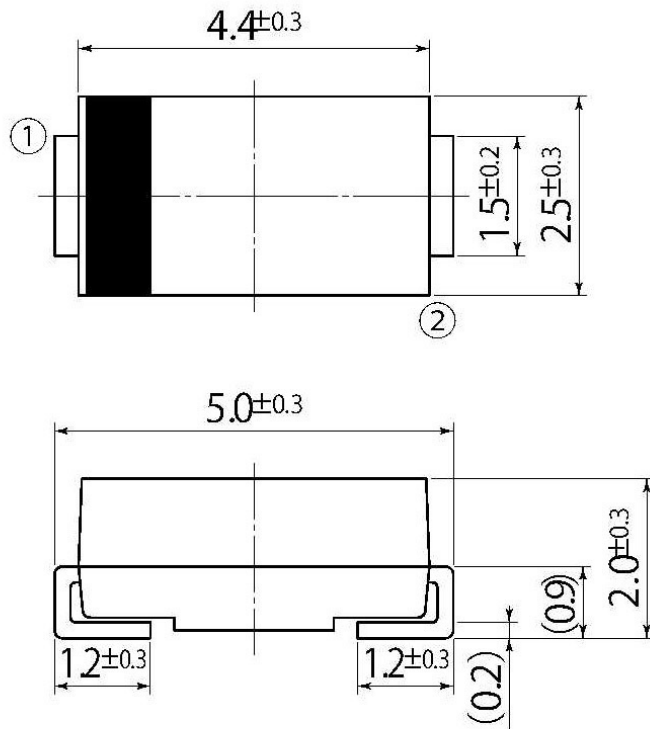


Transient Thermal Impedance



B3

JEDEC Code	DO-214AC
JEITA Code	-
House Name	1F



Referential Soldering Pad

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

## Notes

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