

# D1FS4A

## Schottky Barrier Diodes

40V, 1.5A

### 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 : Tl=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T <sub>stg</sub>		-55 to 150	°C
Junction temperature	T <sub>j</sub>		150	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		40	V
Repetitive peak surge reverse voltage	V <sub>RRSM</sub>	Pulse width 0.5ms, duty=1/40	45	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, On alumina substrate, Ta=28°C	1.5	A
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=36°C	1.1	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, T <sub>j</sub> =25°C	60	A
Repetitive peak surge reverse power	P <sub>RRSM</sub>	Pulse width 10μs, T <sub>j</sub> =25°C	160	W

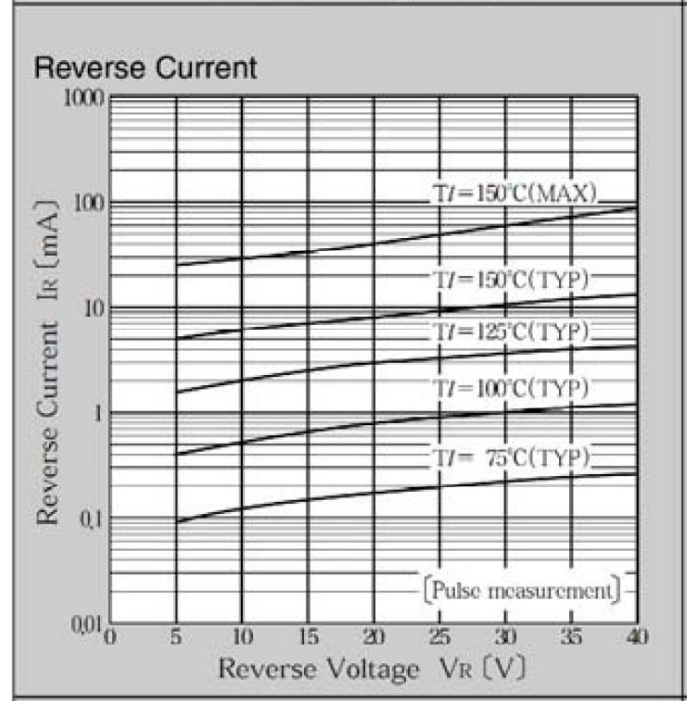
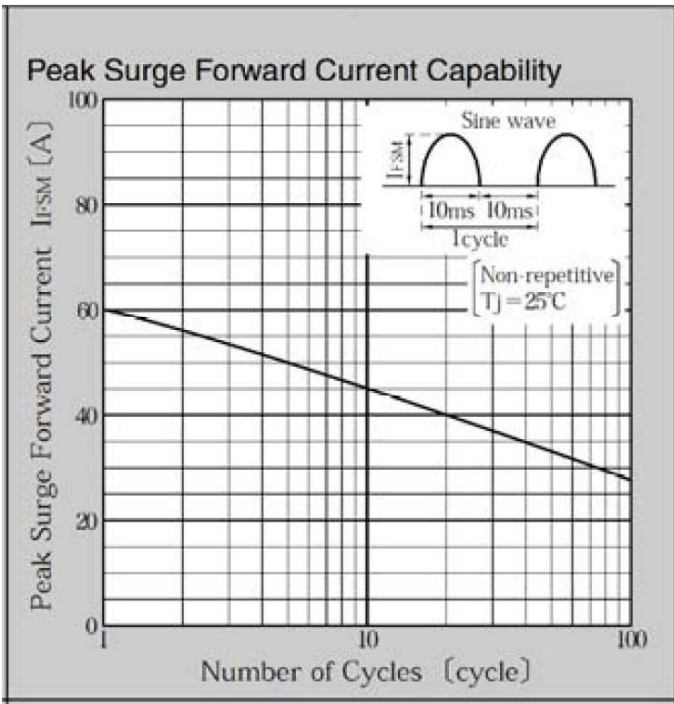
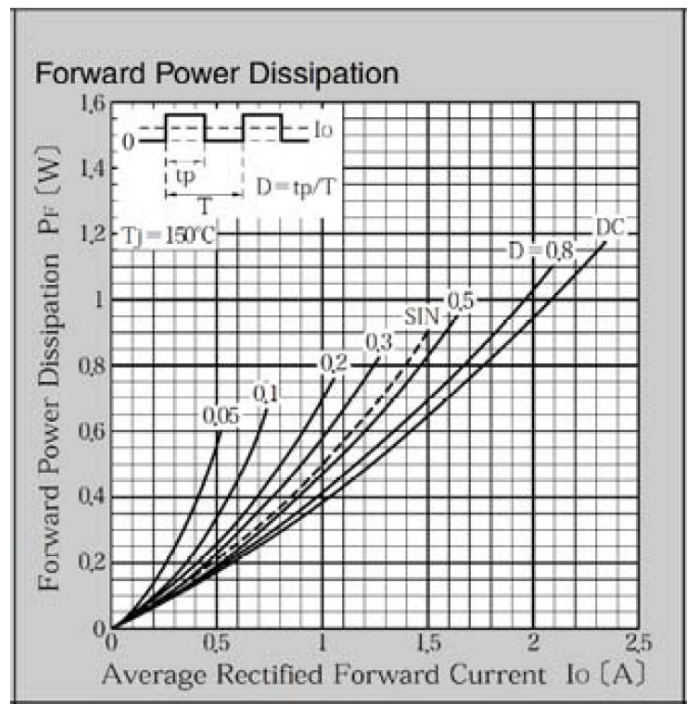
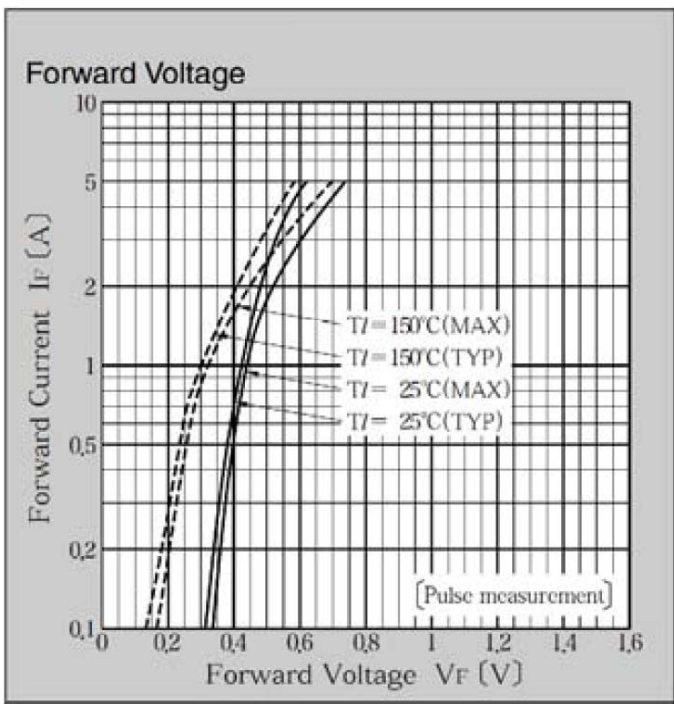
※ :See the original Specifications

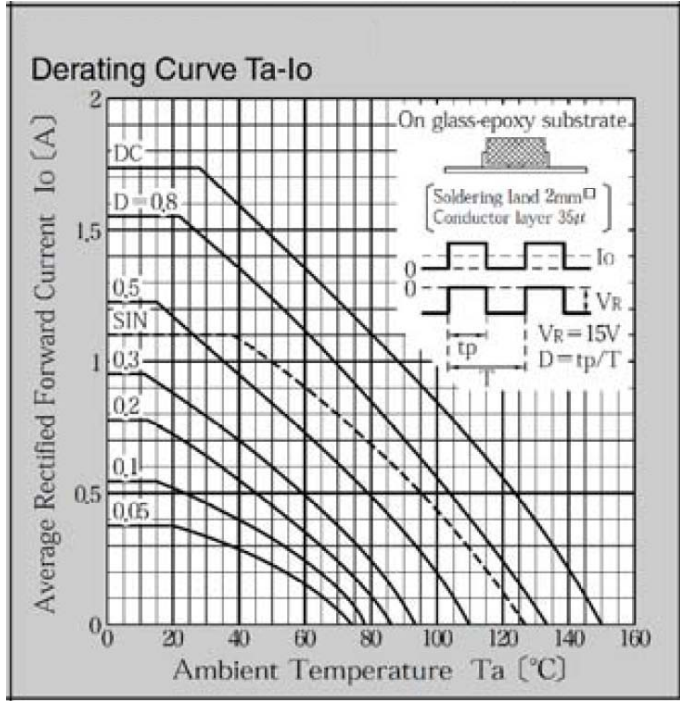
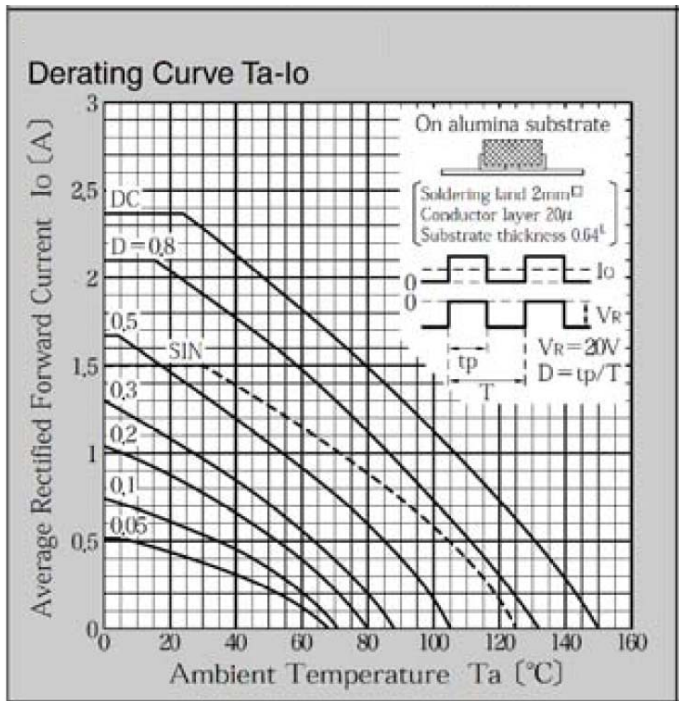
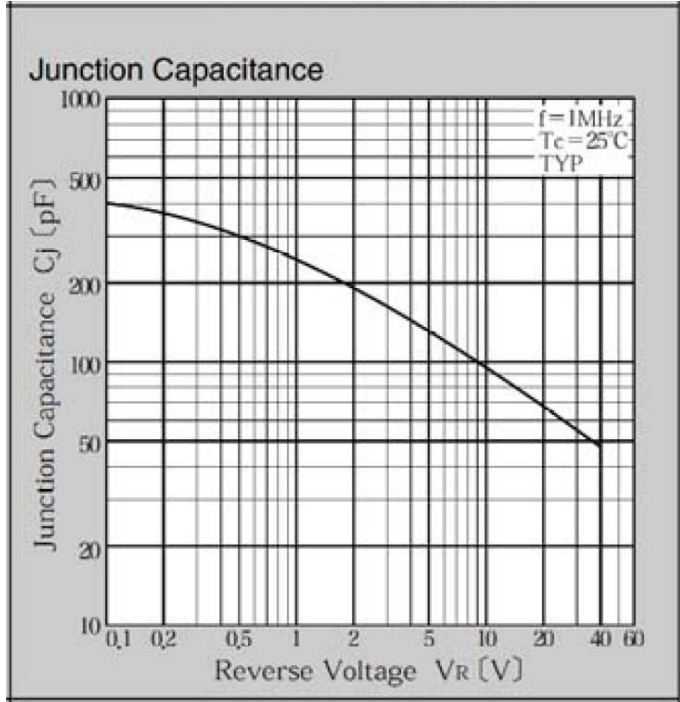
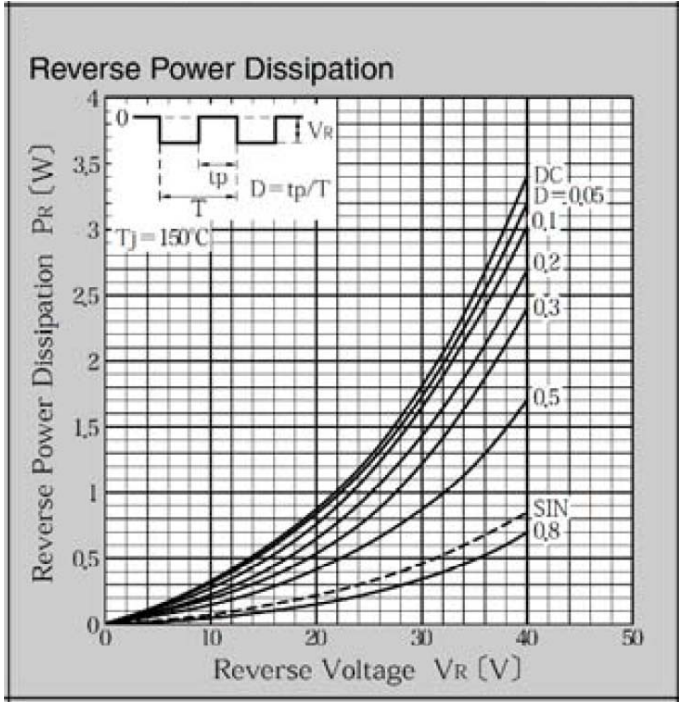
**Electrical Characteristics** (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	IF=1.5A, Pulse measurement			0.48	V
Forward voltage	$V_F$	IF=1.1A, Pulse measurement			0.45	V
Reverse current	$I_R$	VR=40V, Pulse measurement			2	mA
Total capacitance	$C_t$	f=1MHz, VR=10V		95		pF
Thermal resistance	Rth(j-l)	Junction to lead			23	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On alumina substrate			108	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate			157	°C/W

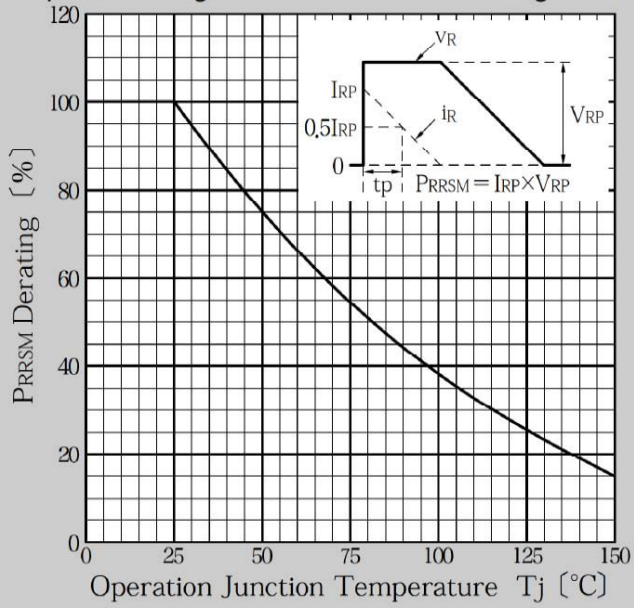
※ :See the original Specifications

# CHARACTERISTIC DIAGRAMS

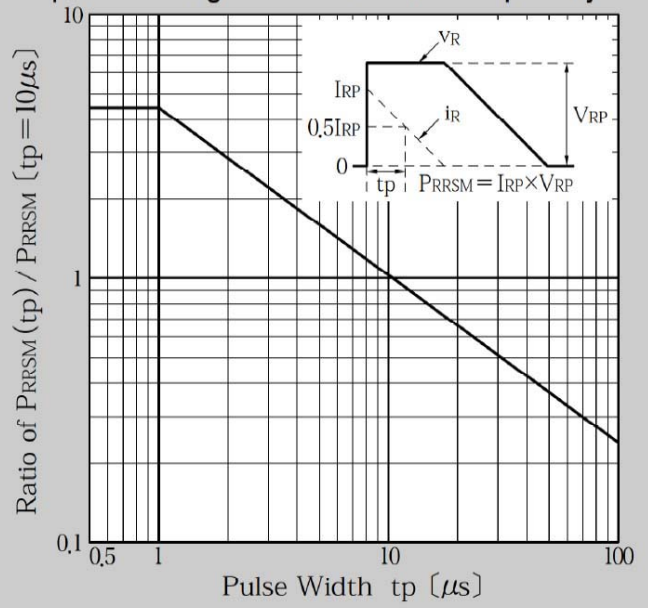




Repetitive Surge Reverse Power Derating Curve



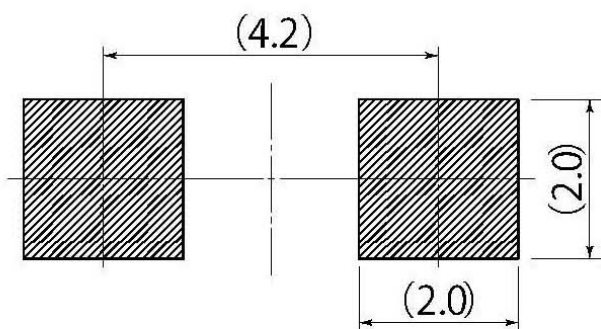
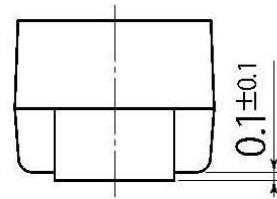
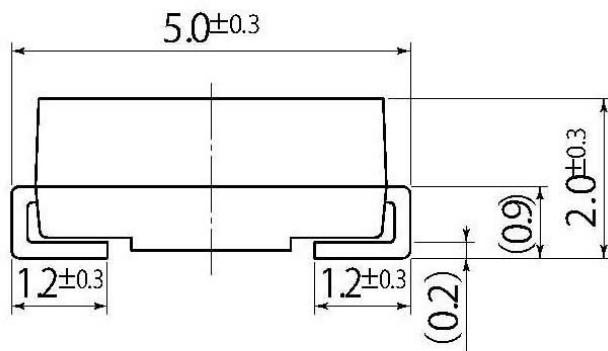
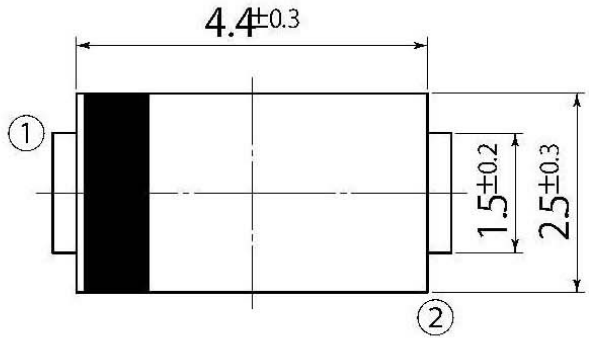
Repetitive Surge Reverse Power Capability





B3

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



Referential Soldering Pad

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

## Notes

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