

D1FT10A  
Schottky Barrier Diodes  
100V, 3A

Feature

- Small SMD
- High Recovery Speed
- Tj=175°C
- Ultra low I<sub>R</sub>
- 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 temperrature	Tstg		-55 to 175	°C
Junction temperature	Tj		-55 to 175	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		100	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, Tl=116°C	3	A
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, On alumina substrate, Ta=25°C ※	1.9	A
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※	1.4	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	60	A

※ :See the original Specifications

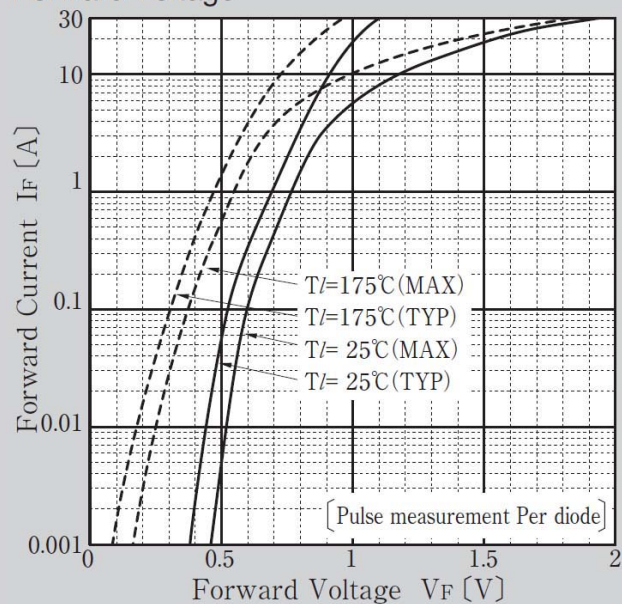
**Electrical Characteristics** (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	IF=3A, Pulse measurement			0.86	V
Forward voltage	$V_F$	IF=1A, Pulse measurement			0.75	V
Reverse current	$I_R$	VR=100V, Pulse measurement			0.008	mA
Total capacitance	$C_t$	f=1MHz, VR=10V		60		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

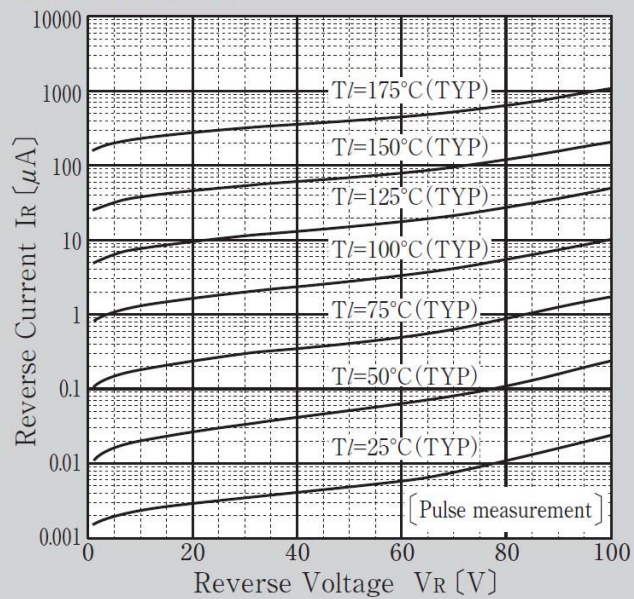
※ :See the original Specifications

## CHARACTERISTIC DIAGRAMS

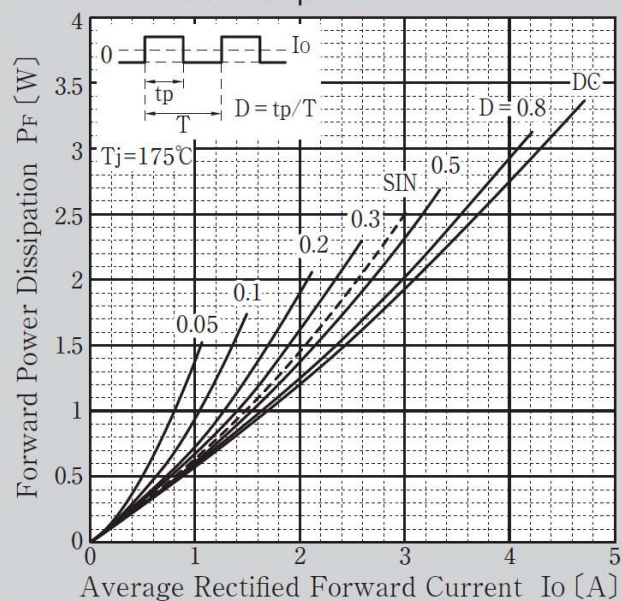
Forward Voltage



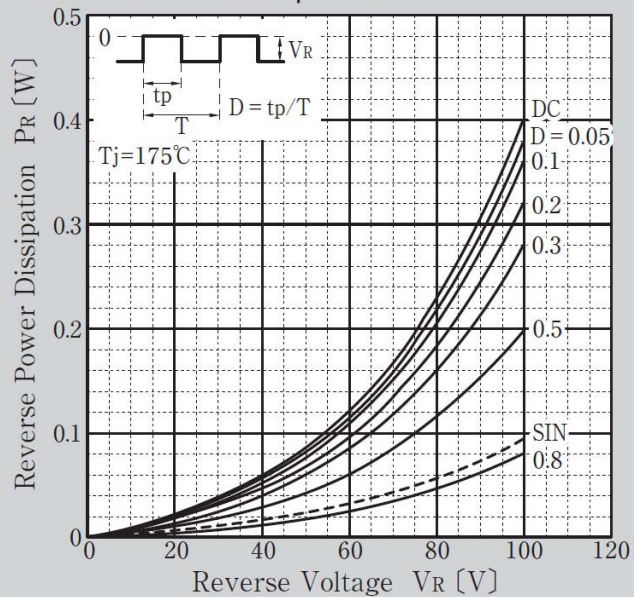
Reverse Current

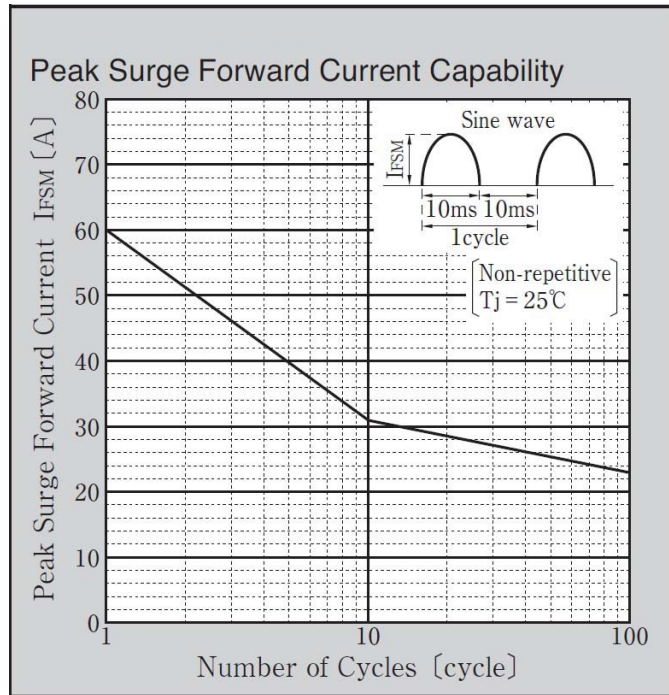
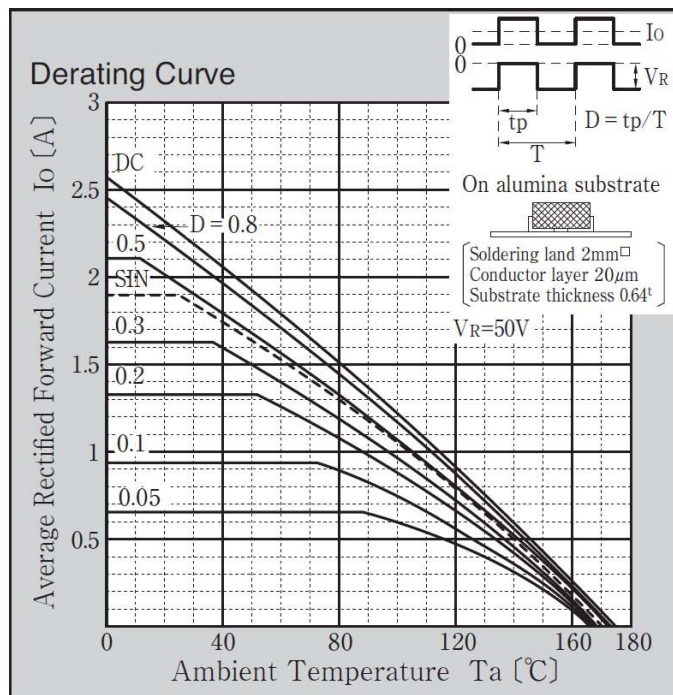
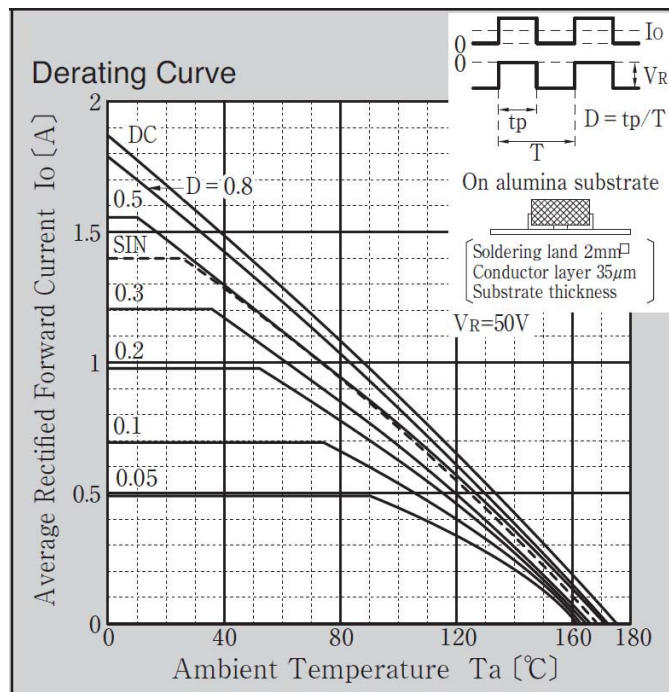
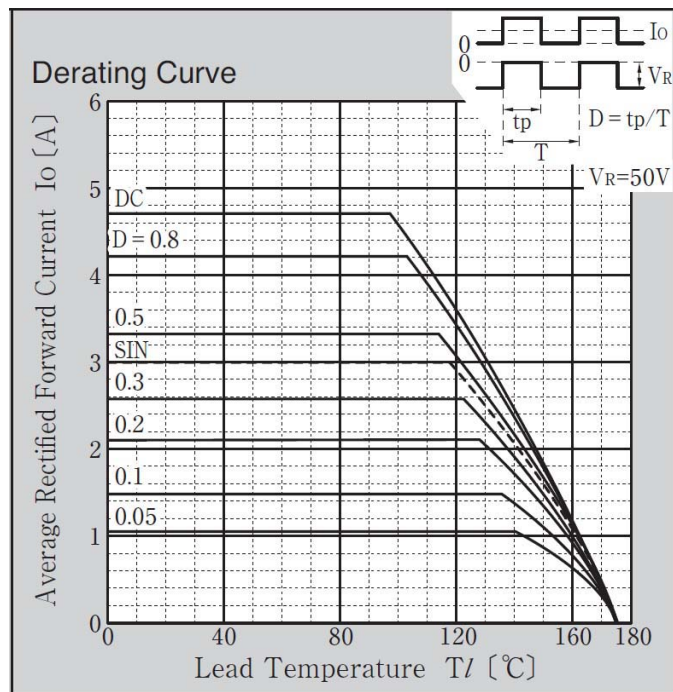


Forward Power Dissipation



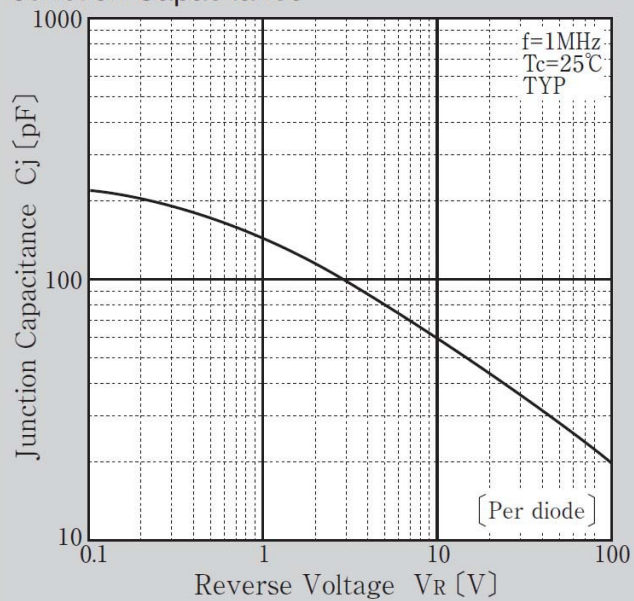
Reverse Power Dissipation



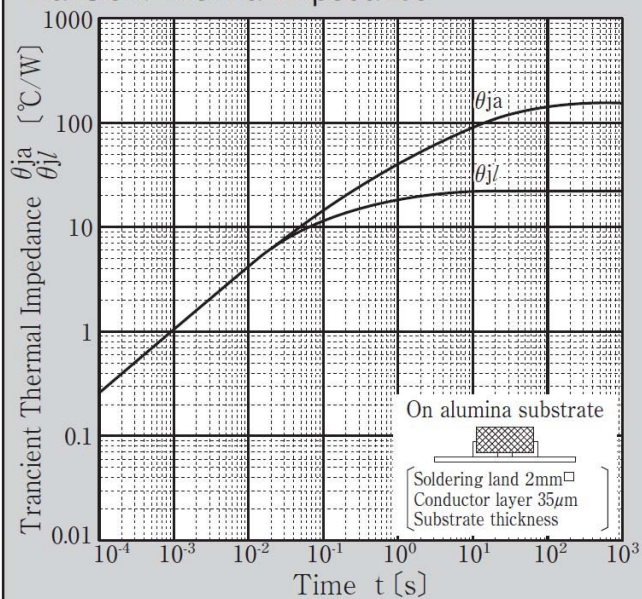




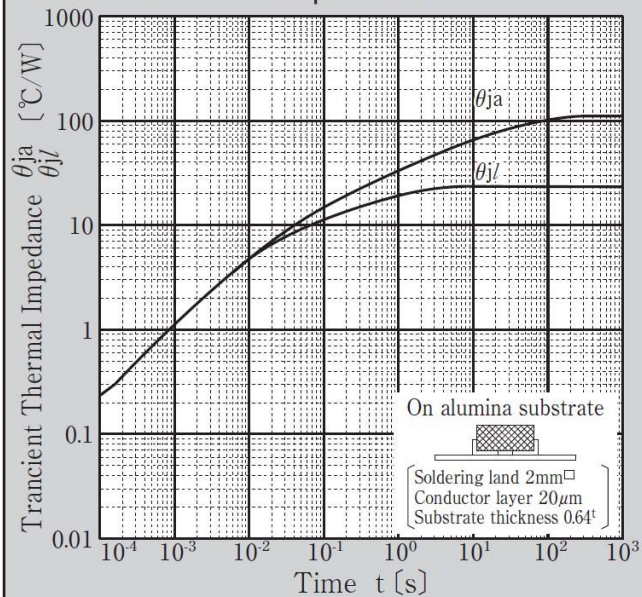
### Junction Capacitance



### Transient Thermal Impedance

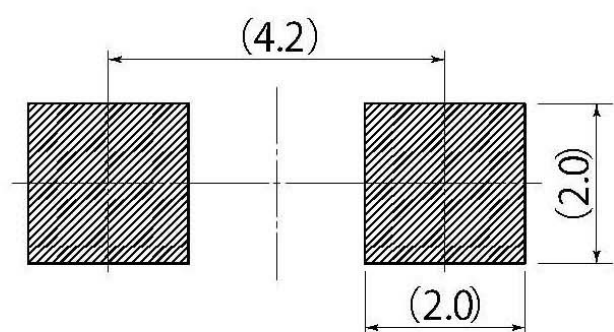
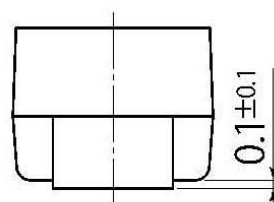
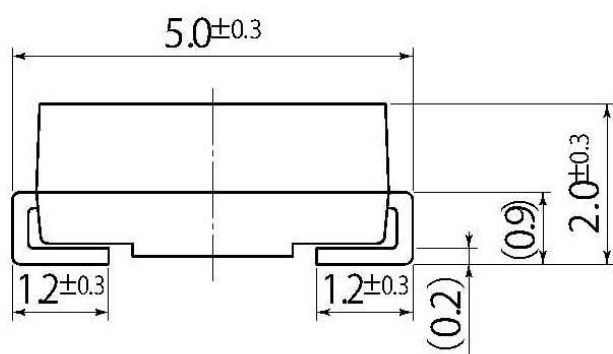
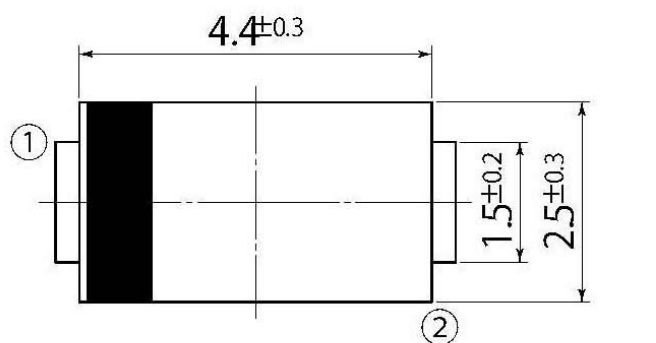


### Transient Thermal Impedance



B3

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



Referential Soldering Pad

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

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