

D1FT4

Schottky Barrier Diodes 40V, 2A

Feature

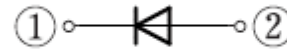
- Small SMD
- Tj=175°C
- Ultra low I_R
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

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 _{stg}		-55 to 175	°C
Junction temperature	T _j		175	°C
Repetitive peak reverse voltage	V _{RRM}		40	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Tl=143°C	2	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On alumina substrate, Ta=25°C	2	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C	1.5	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	60	A

※ :See the original Specifications

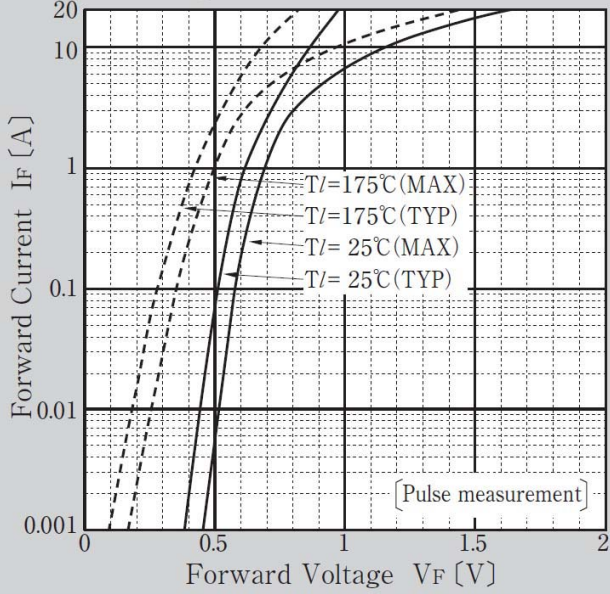
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=2.0A, Pulse measurement			0.74	V
Forward voltage	V_F	IF=1.0A, Pulse measurement			0.69	V
Reverse current	I_R	VR=40V, Pulse measurement			0.005	mA
Total capacitance	C_t	f=1MHz, VR=10V		63		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

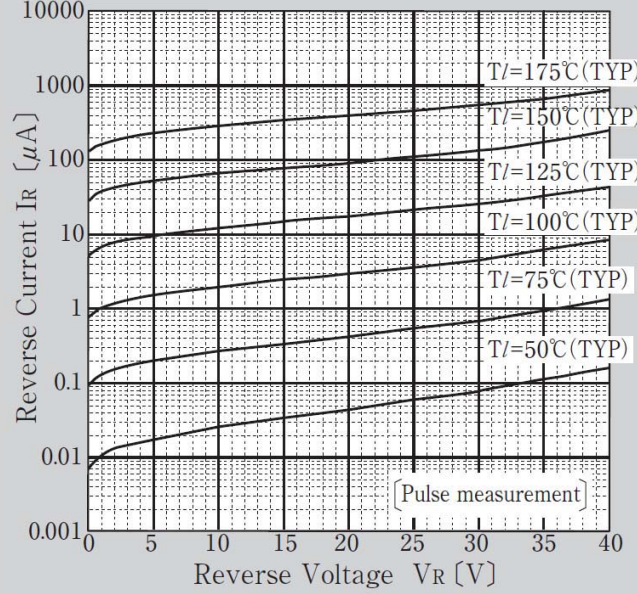
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

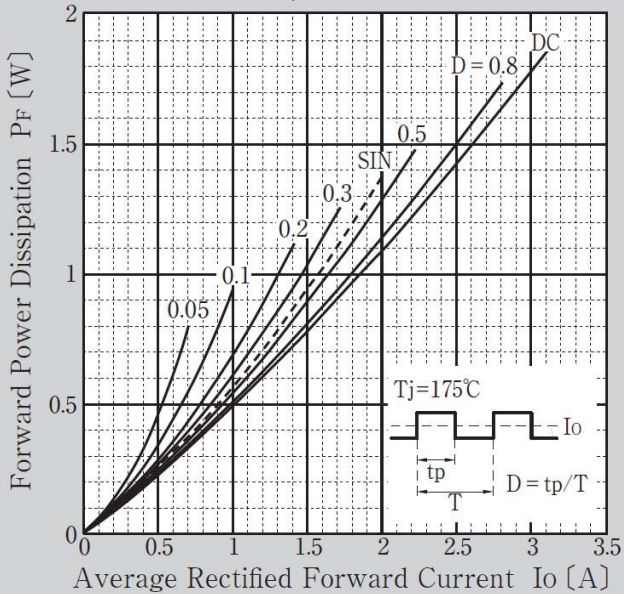
Forward Voltage



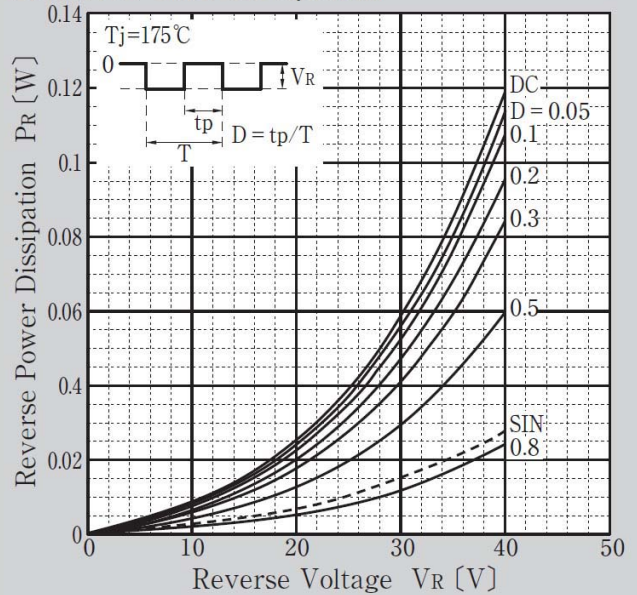
Reverse Current

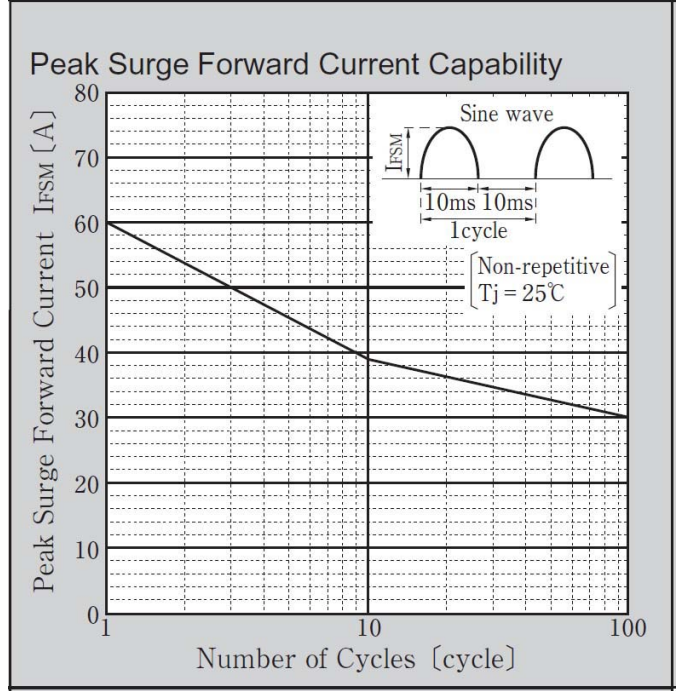
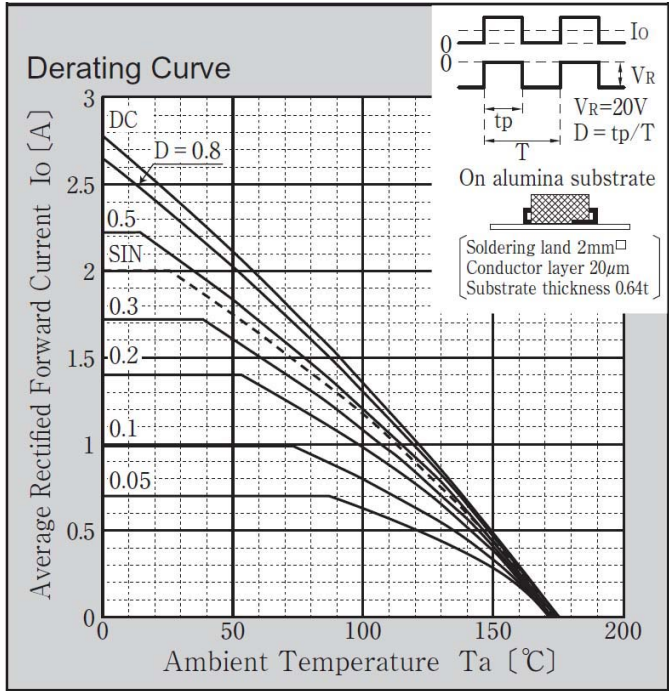
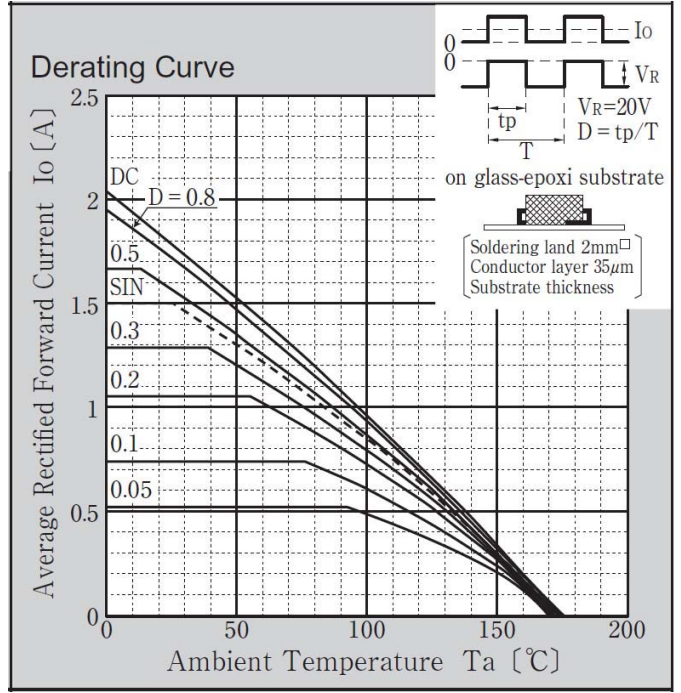
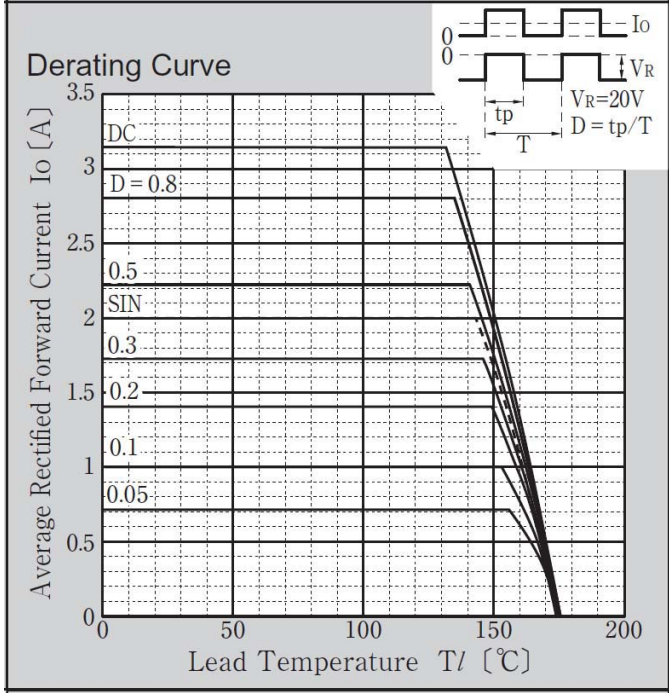


Forward Power Dissipation

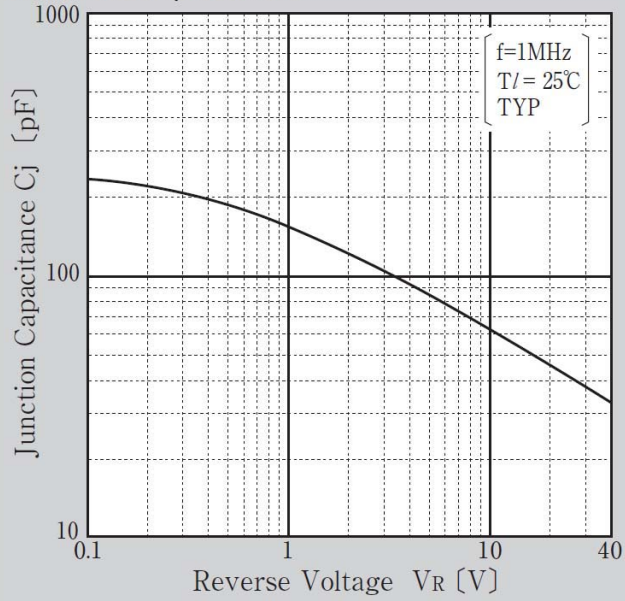


Reverse Power Dissipation

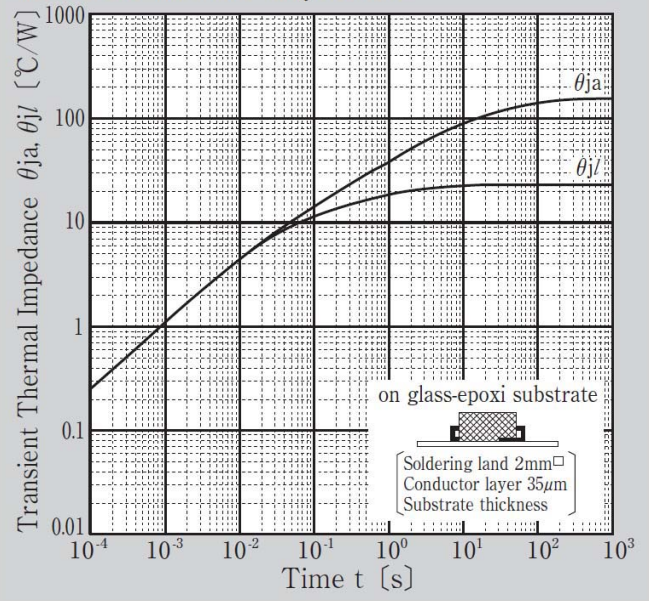




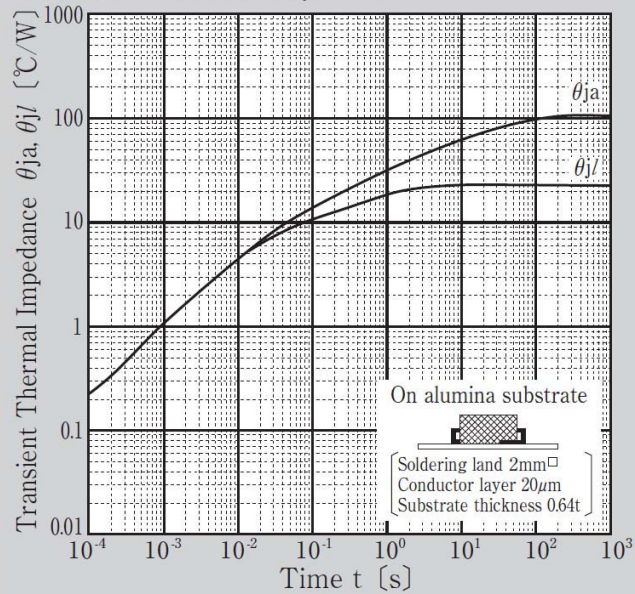
Junction Capacitance



Transient Thermal Impedance



Transient Thermal Impedance



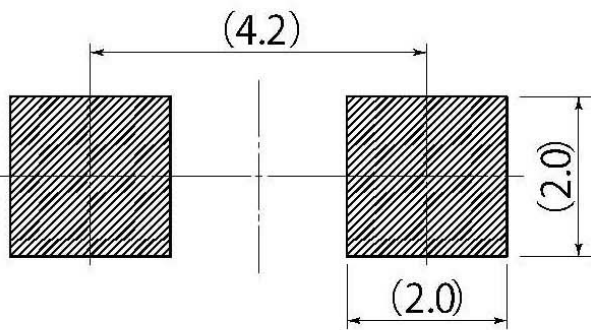
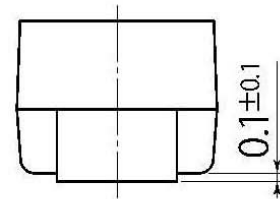
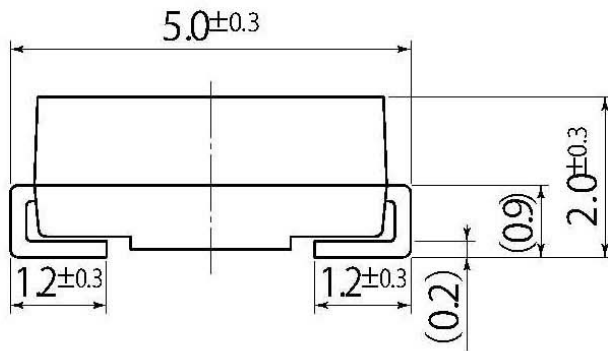
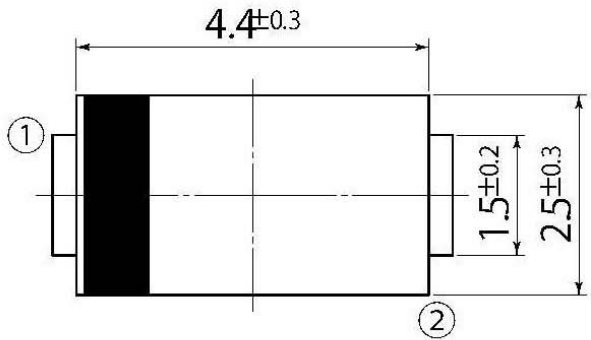
Outline Dimensions

unit:mm

scale: 10/1

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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