

D1FJ4

Schottky Barrier Diodes 40V, 2A

Feature

- Small SMD
- High Recovery Speed
- 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 150	°C
Junction temperature	T _j		-55 to 150	°C
Repetitive peak reverse voltage	V _{RRM}		40	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Tl=117°C	2	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On alumina substrate, Ta=48°C ※	1.5	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=62°C ※	1	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, T _j =25°C	50	A

※ : See the original Specifications

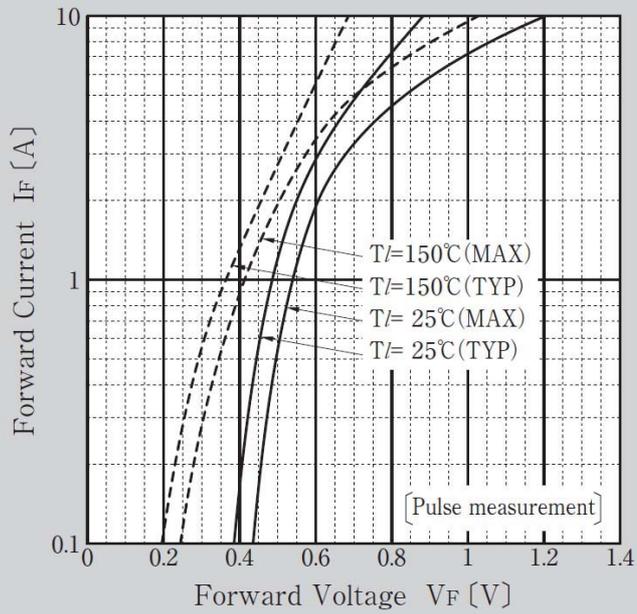
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=2.0A, Pulse measurement			0.61	V
Forward voltage	V_F	IF=1.5A, Pulse measurement			0.57	V
Reverse current	I_R	VR=40V, Pulse measurement			0.2	mA
Total capacitance	C_t	f=1MHz, VR=10V		96		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

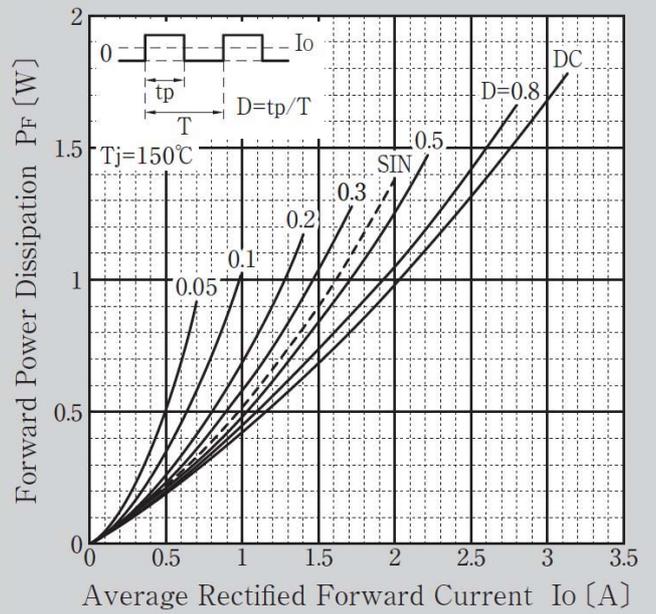
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

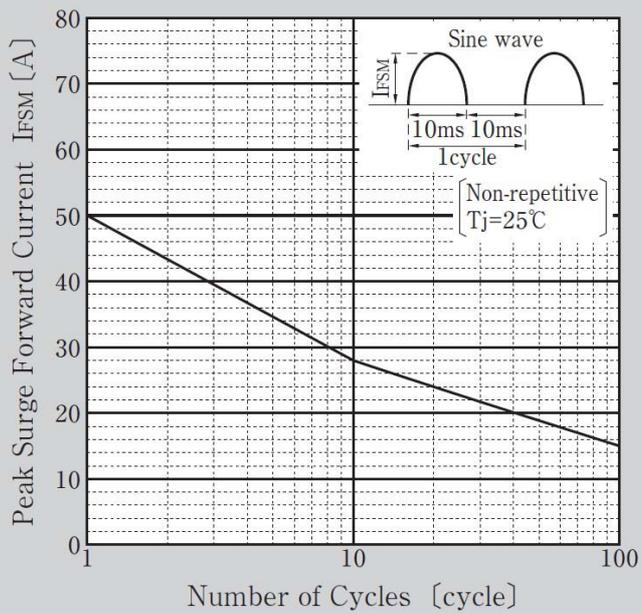
Forward Voltage



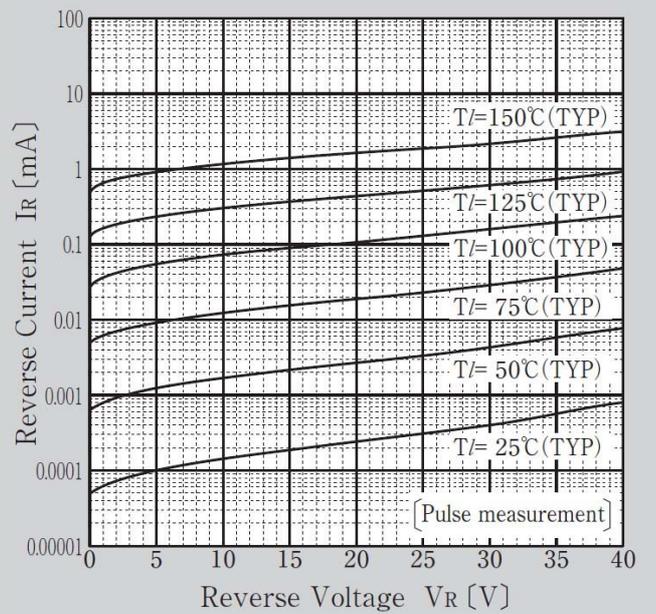
Forward Power Dissipation



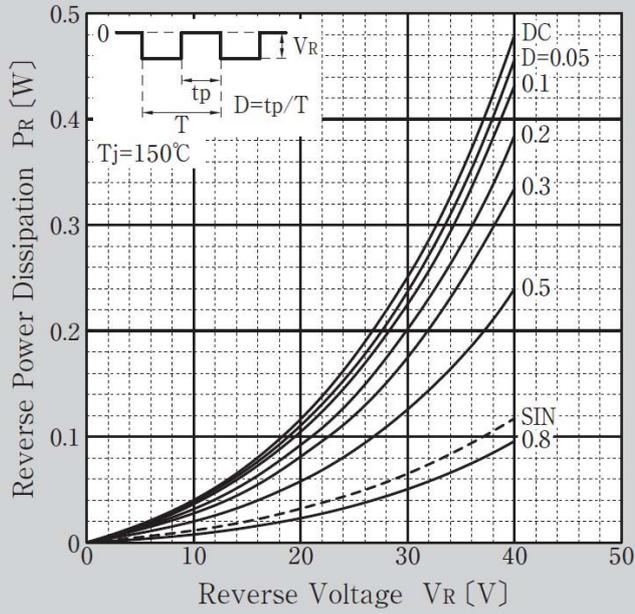
Peak Surge Forward Current Capability



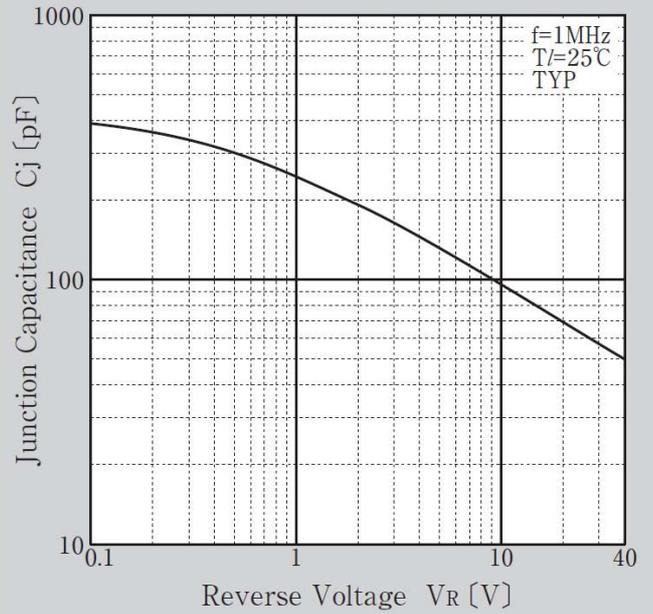
Reverse Current



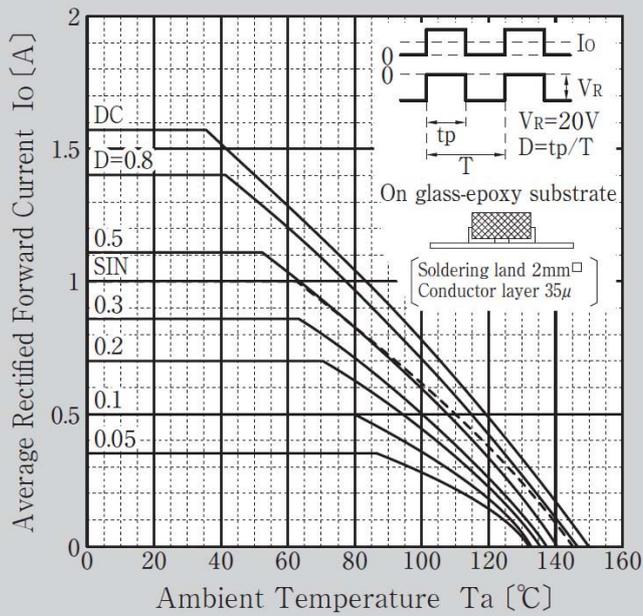
Reverse Power Dissipation



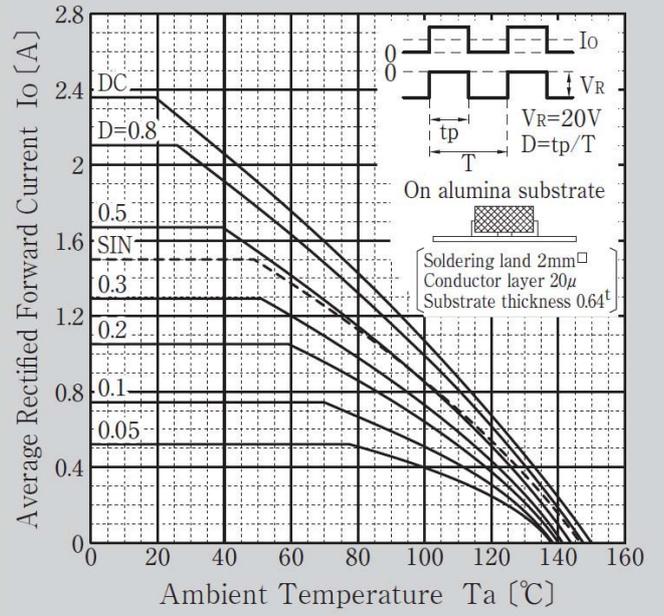
Junction Capacitance



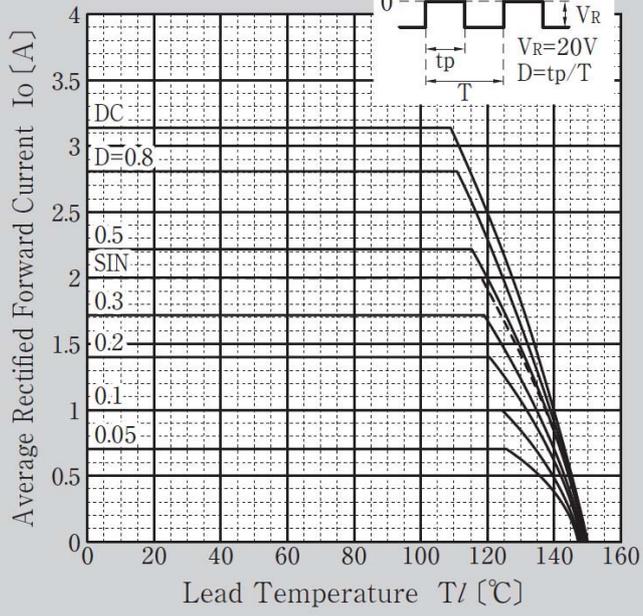
Derating Curve



Derating Curve

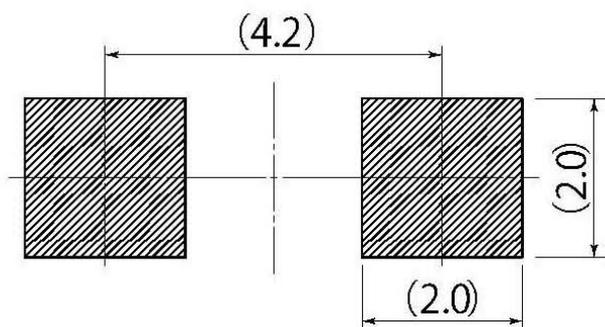
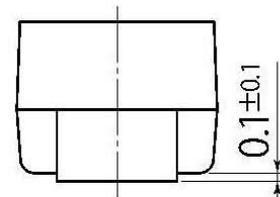
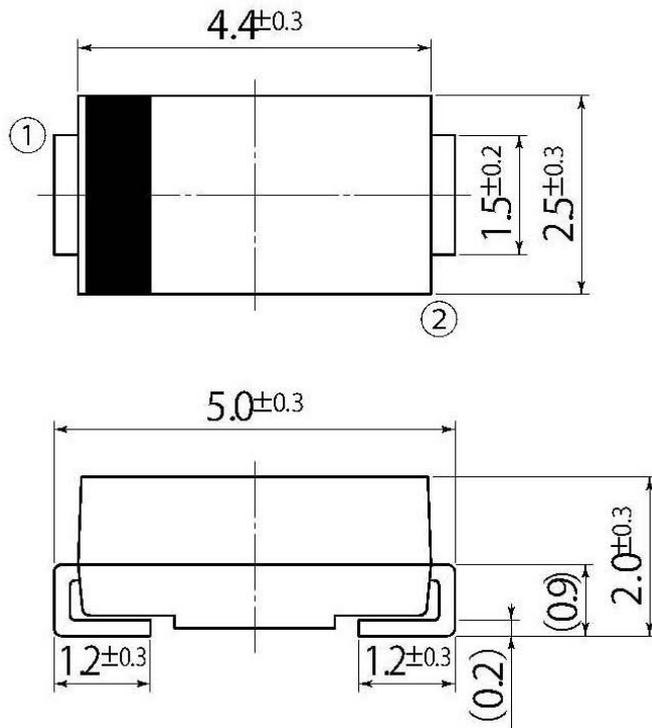


Derating Curve



B3

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



Referential Soldering Pad

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