ShinDengen

D1FS4

Schottky Barrier Diodes
40V, 1.1A

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℃)

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	℃
Junction temperature	Tj		150	℃
Repetitive peak reverse voltage	V_{RRM}		40	V
Repetitive peak surge reverse voltage	V_{RRSM}	Pulse width 0.5ms, duty=1/40	45	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On alumina substrate, Ta=51℃	1.1	A
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=44℃	0.85	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=125℃	30	A
Repetitive peak surge reverse power	P_{RRSM}	Pulse width 10μs, Tj=25℃	60	W

※ :See the original Specifications

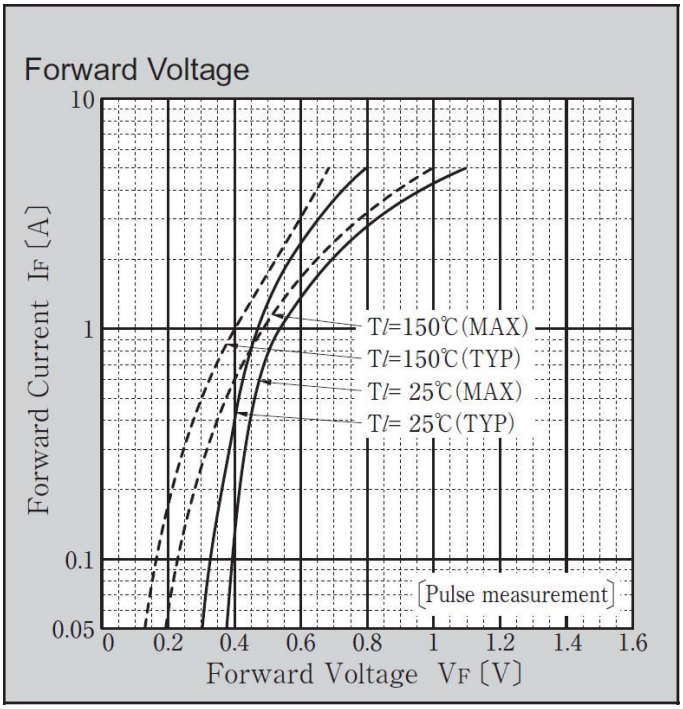
Electrical Characteristics (unless otherwise specified : Tl=25℃)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=1.1A, Pulse measurement			0.55	V
Reverse current	I_R	VR=40V, Pulse measurement			1	mA
Total capacitance	Ct	f=1MHz, VR=10V		65		pF
Thermal resistance	Rth(j-l)	Junction to lead			23	℃/W
Thermal resistance	Rth(j-a)	Junction to ambient, On alumina substrate			108	℃/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate			157	℃/W

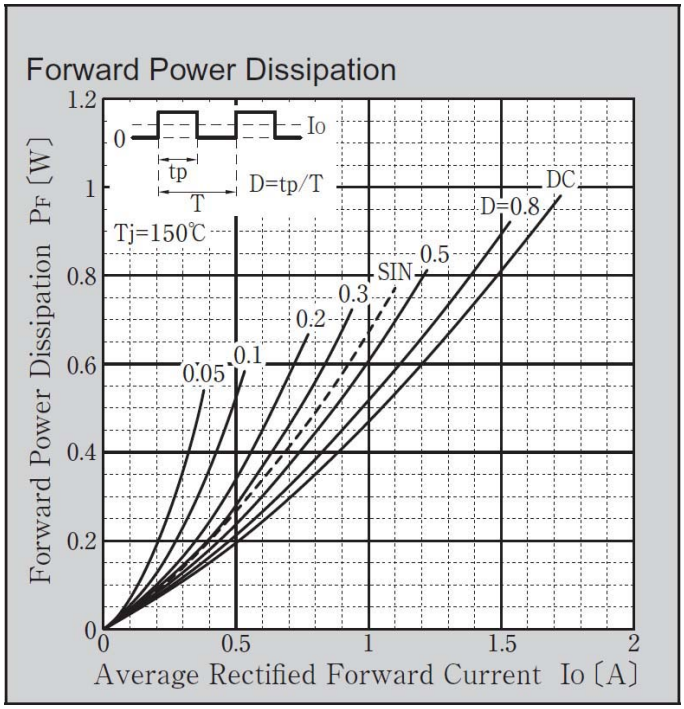
※ ：See the original Specifications

CHARACTERISTIC DIAGRAMS

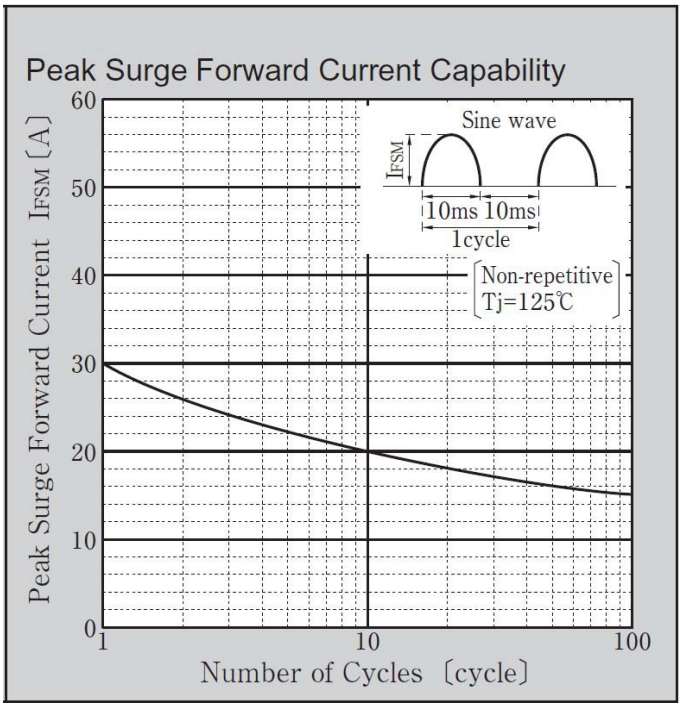
Forward Voltage



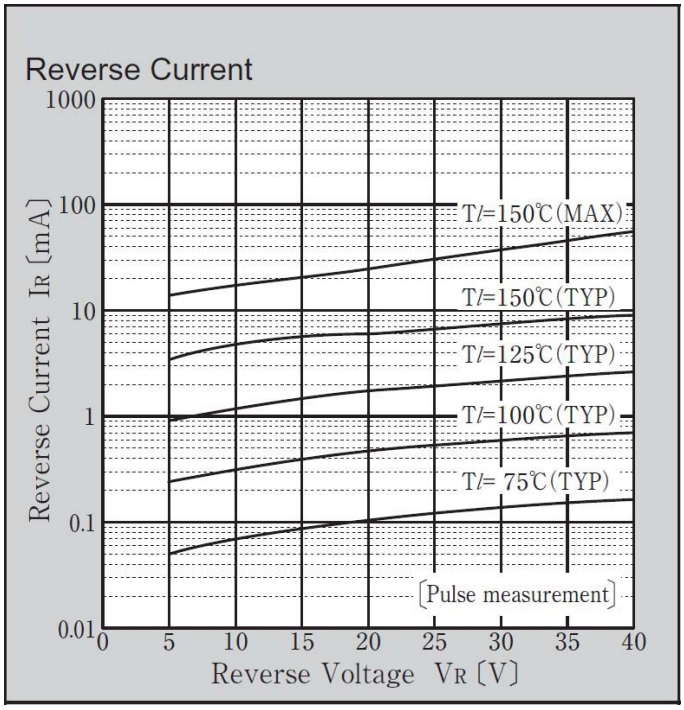
Forward Power Dissipation



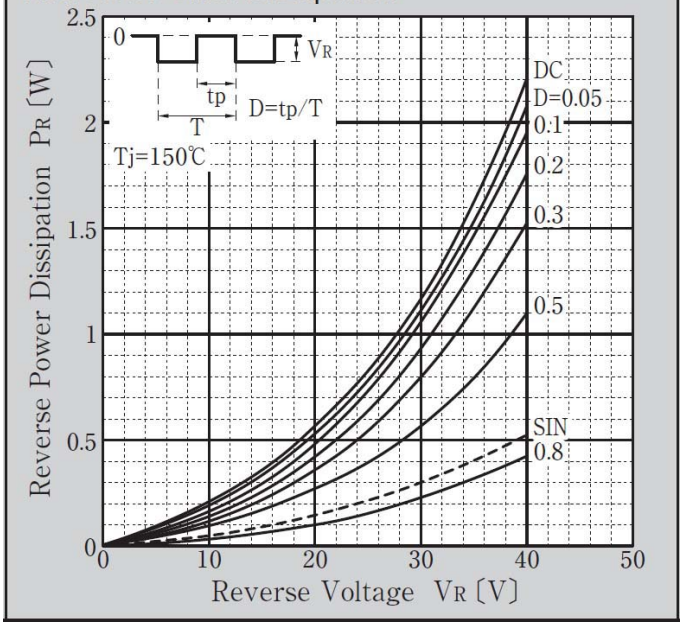
Peak Surge Forward Current Capability



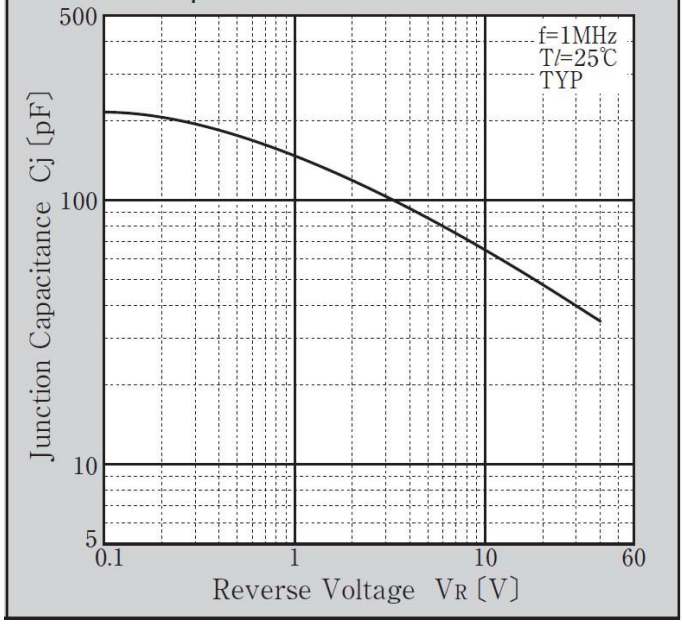
Reverse Current



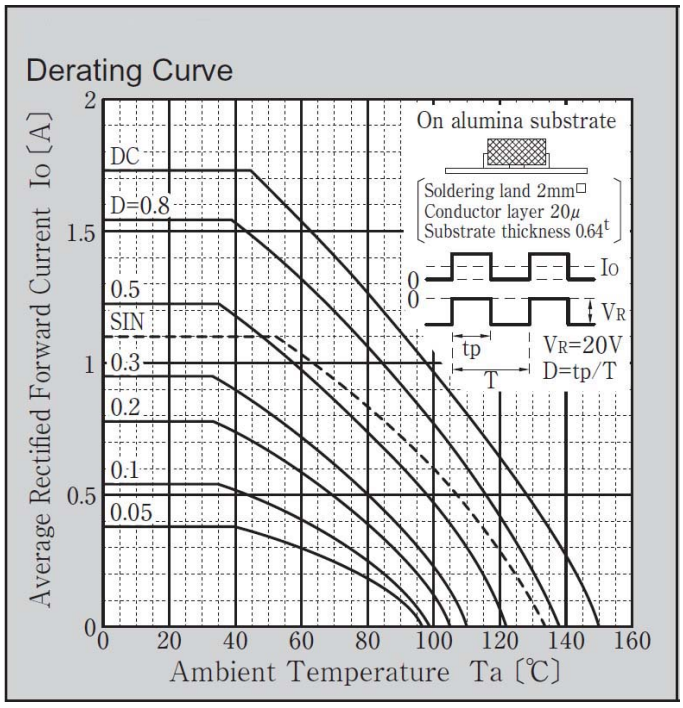
Reverse Power Dissipation



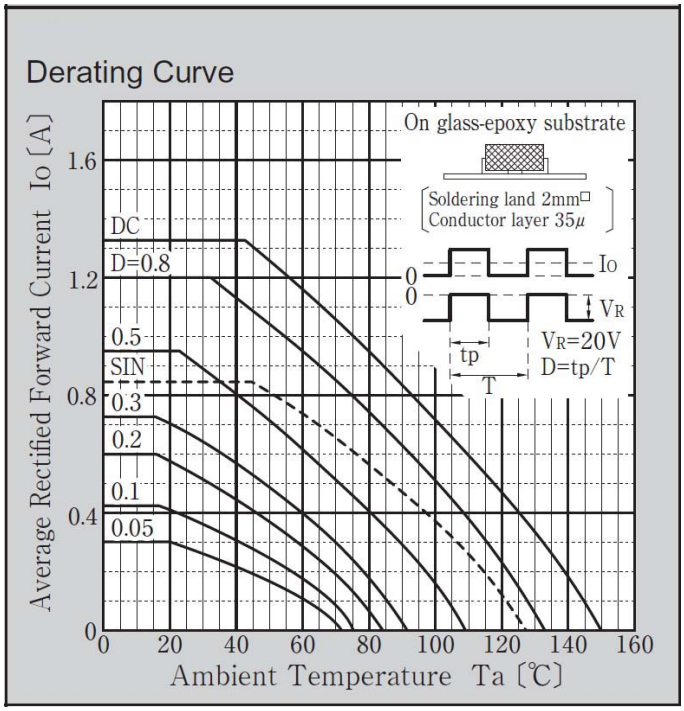
Junction Capacitance



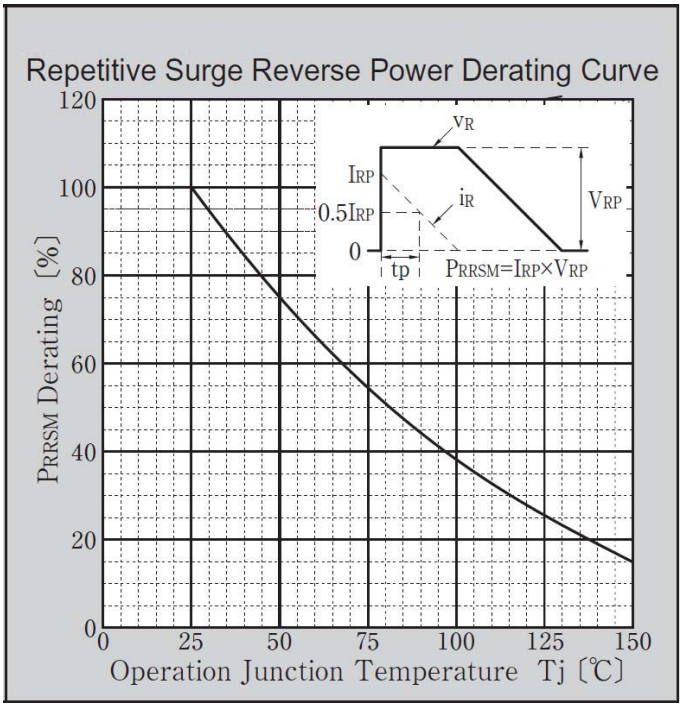
Derating Curve



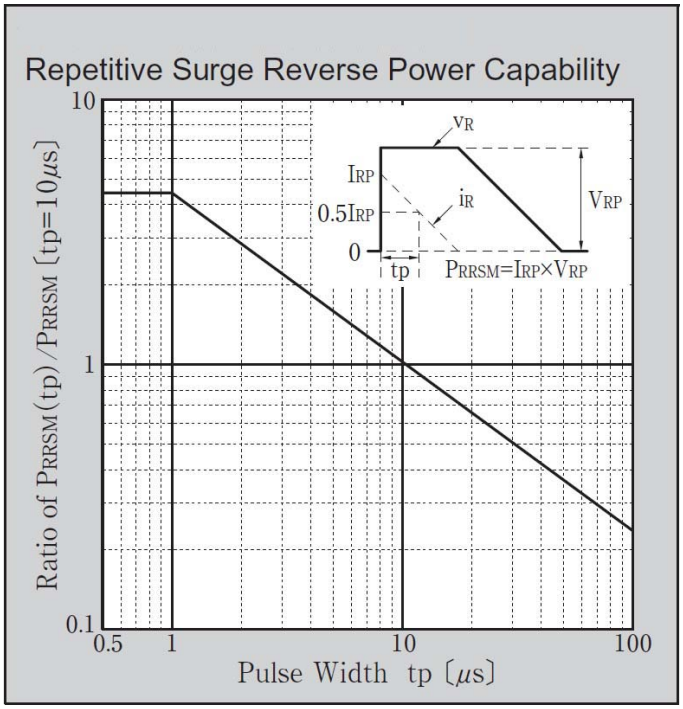
Derating Curve



Repetitive Surge Reverse Power Derating Curve



Repetitive Surge Reverse Power Capability



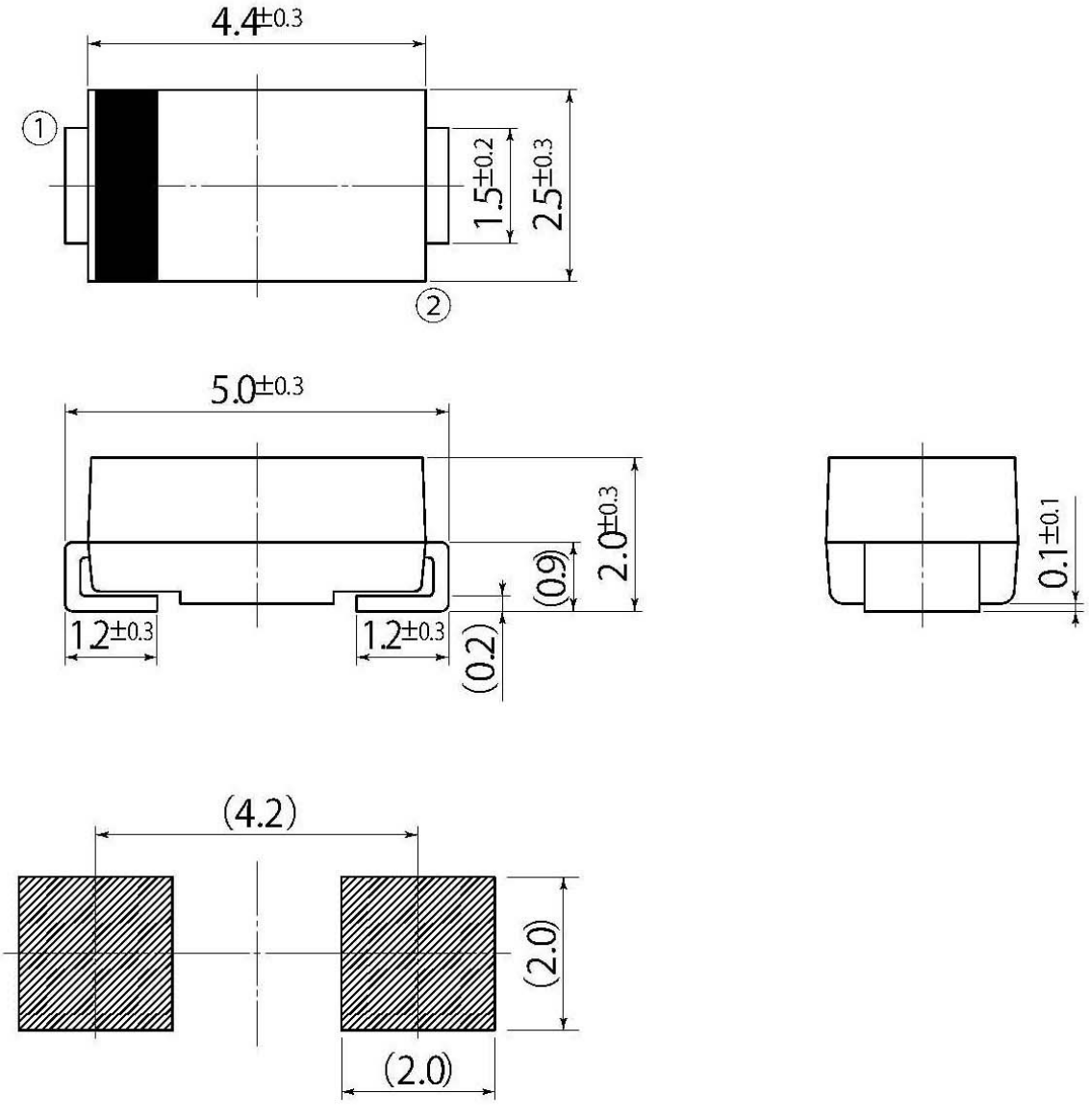
Outline Dimensions

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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