ShinDengen

D3FS4A

Schottky Barrier Diodes
40V, 2.6A

Feature

- Small SMD
- High Recovery Speed
- Low V_F
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): 2F

Equivalent circuit

Absolute Maximum Ratings (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
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=34°C ※	2.6	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=30°C ※	1.9	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=125°C	150	A
Repetitive peak surge reverse power	P_{RRSM}	Pulse width 10μs, Tj=25°C	330	W

※ ：See the original Specifications

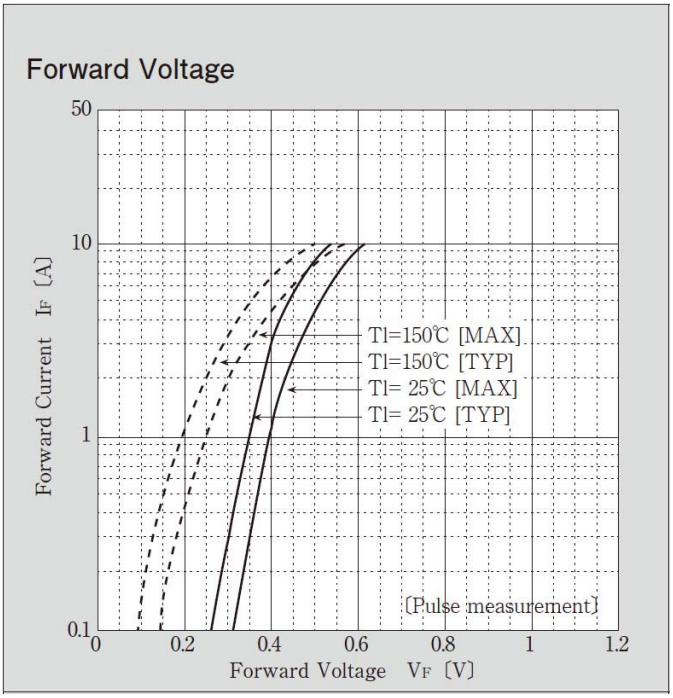
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=2.6A, Pulse measurement			0.45	V
Reverse current	I_R	VR=40V, Pulse measurement			5	mA
Total capacitance	Ct	f=1MHz, VR=10V		340		pF
Thermal resistance	Rth(j-l)	Junction to lead			23	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On alumina substrate ※			80	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			115	°C/W

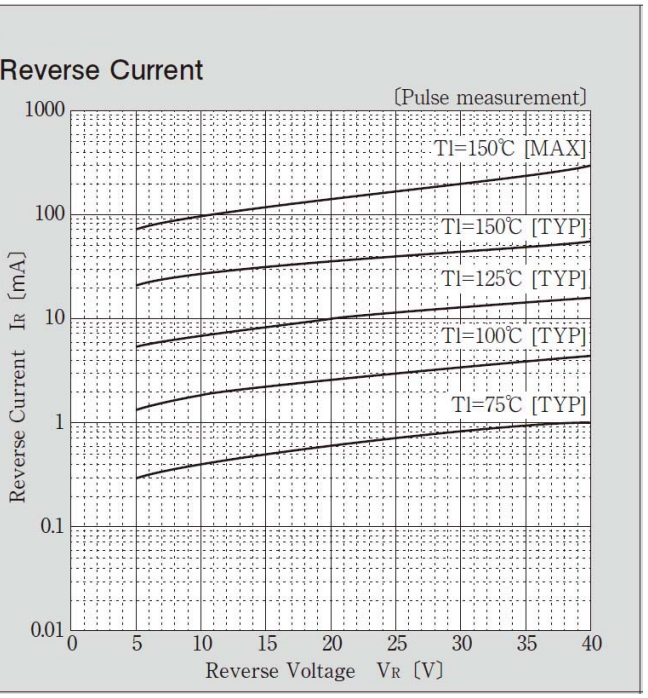
※ ：See the original Specifications

CHARACTERISTIC DIAGRAMS

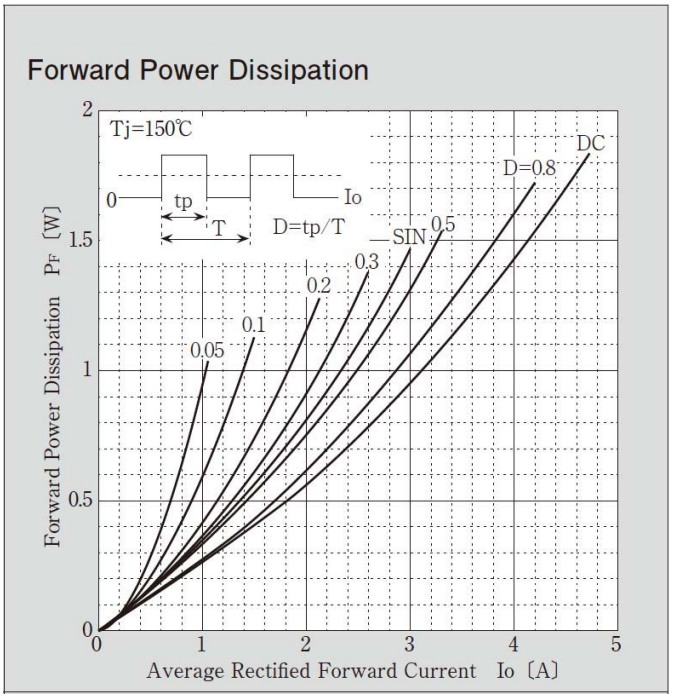
Forward Voltage



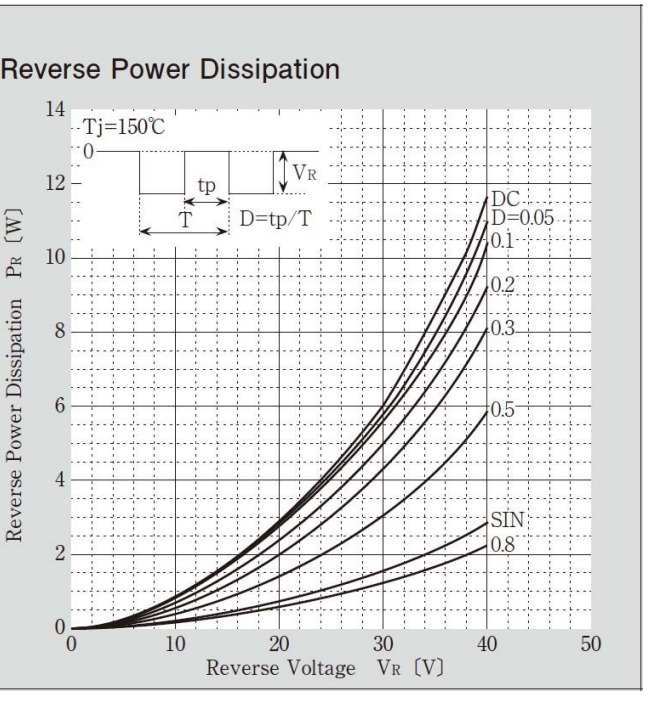
Reverse Current



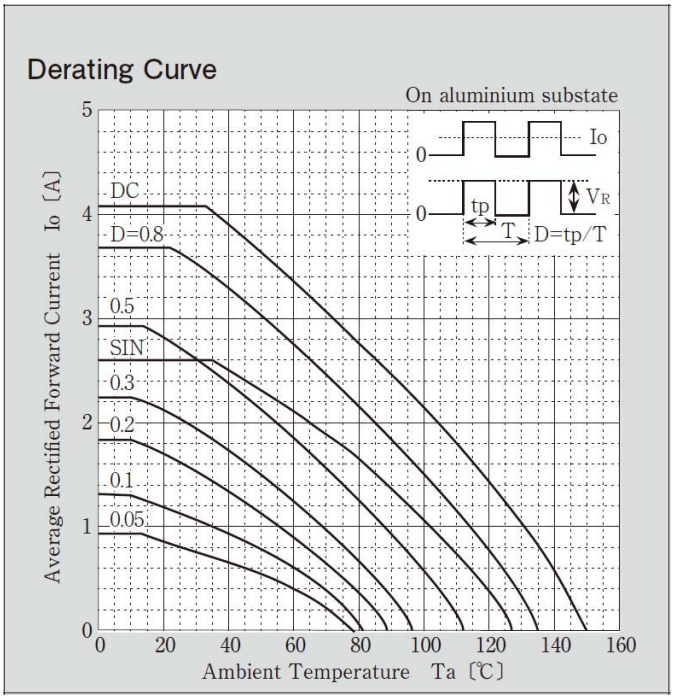
Forward Power Dissipation



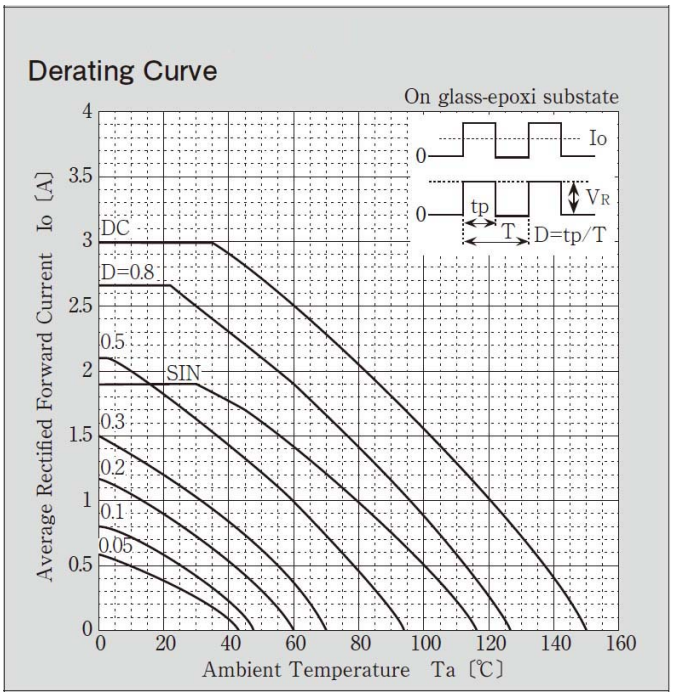
Reverse Power Dissipation



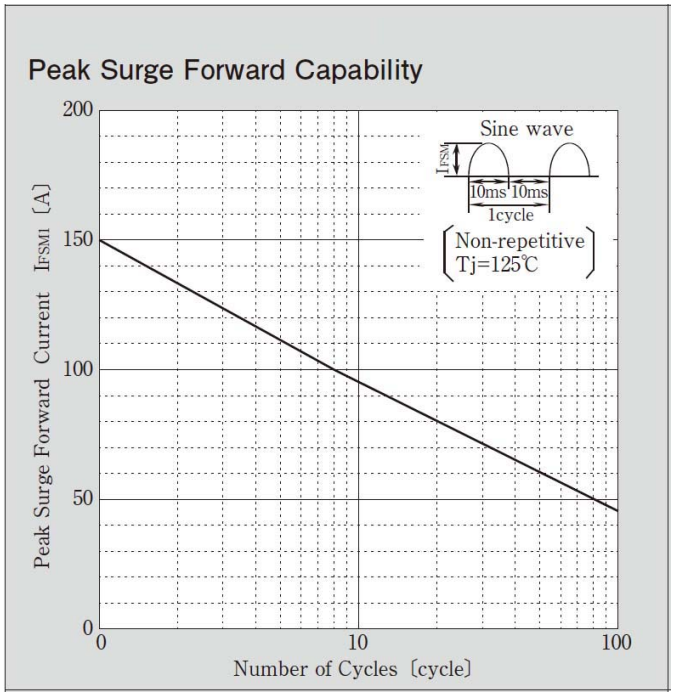
Derating Curve



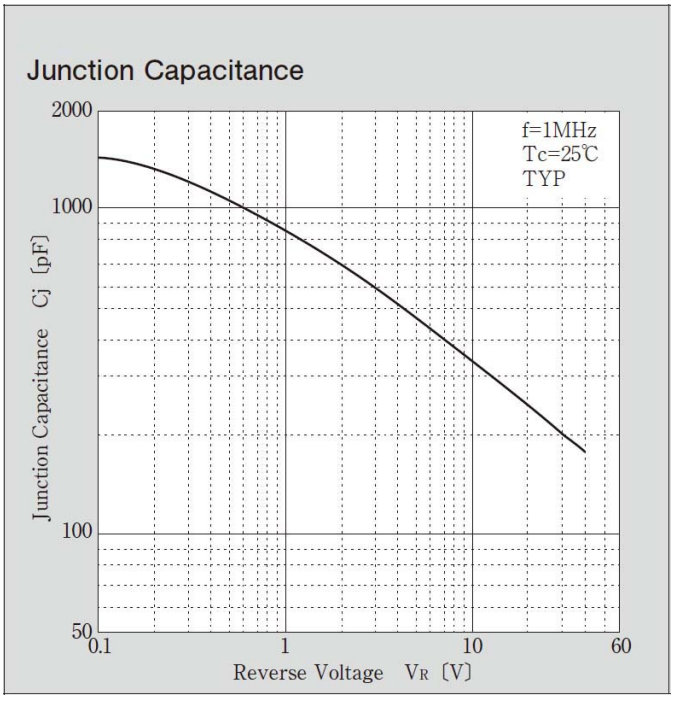
Derating Curve



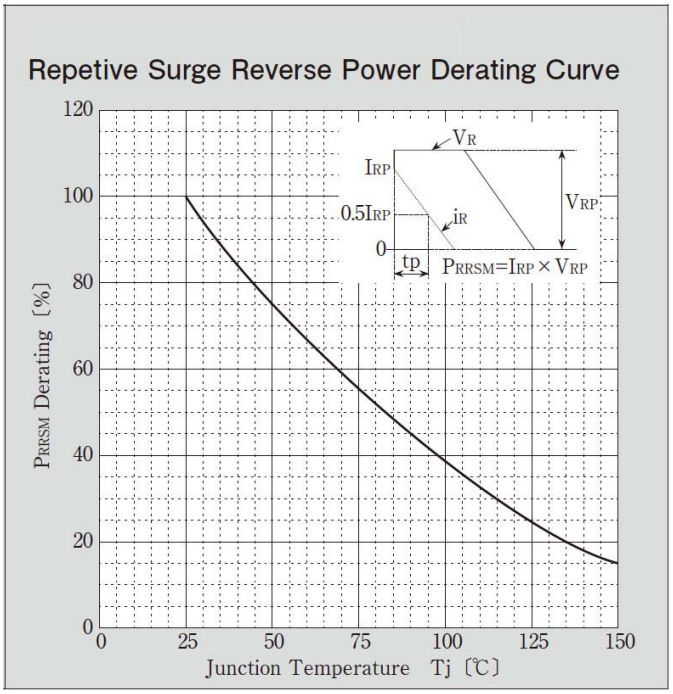
Peak Surge Forward Capability



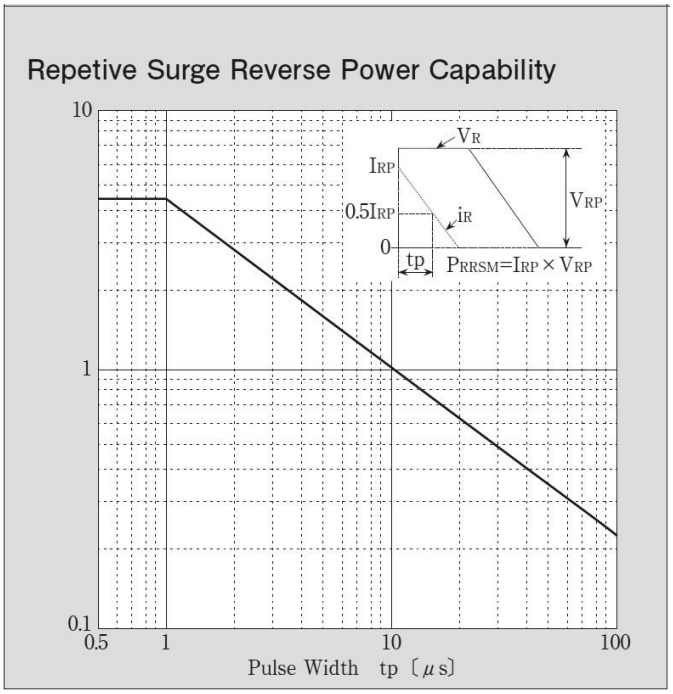
Junction Capacitance



Repetive Surge Reverse Power Derating Curve



Repetive Surge Reverse Power Capability



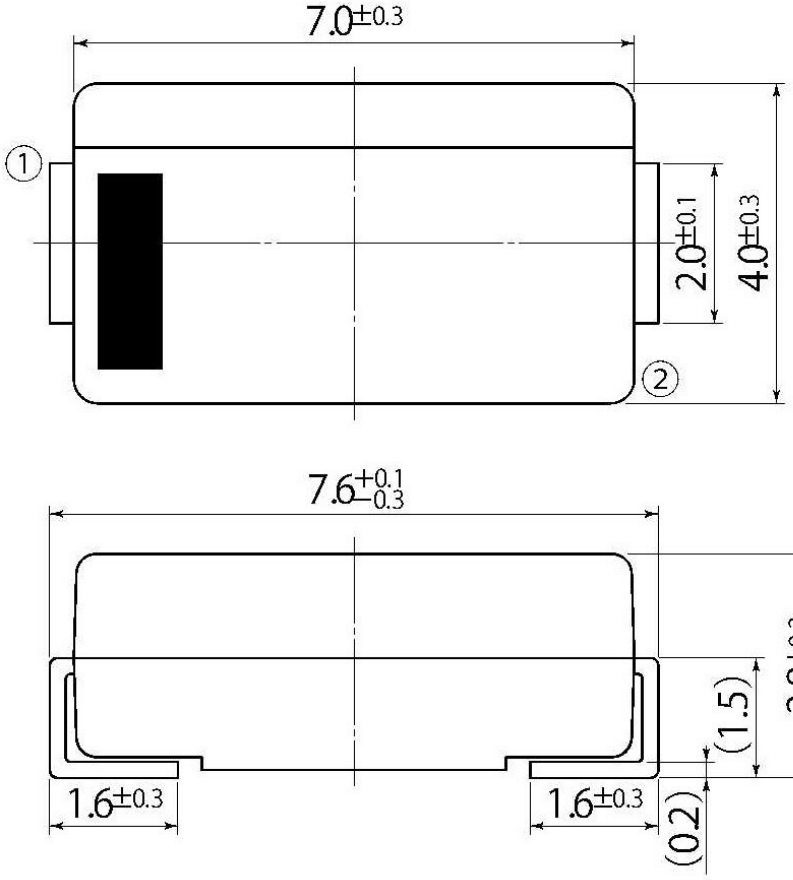
Outline Dimensions

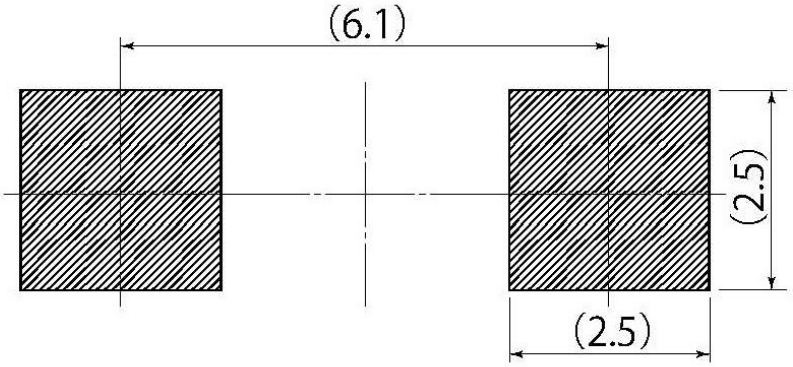
unit:mm

scale: 10/1

B9

JEDEC Code	–
JEITA Code	–
House Name	2F





Referential Soldering Pad

・Optimize soldering pad to the board design and soldering condi tion.

Notes

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