

D3FJ10
Schottky Barrier Diodes
100V, 3A

Feature

- Small SMD
- High Recovery Speed
- Available for automotive use
- 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 temperature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	V _{RRM}		100	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Tl=92°C	3	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On alumina substrate, Ta=28°C ※	2	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=30°C ※	1.4	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	100	A

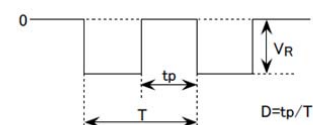
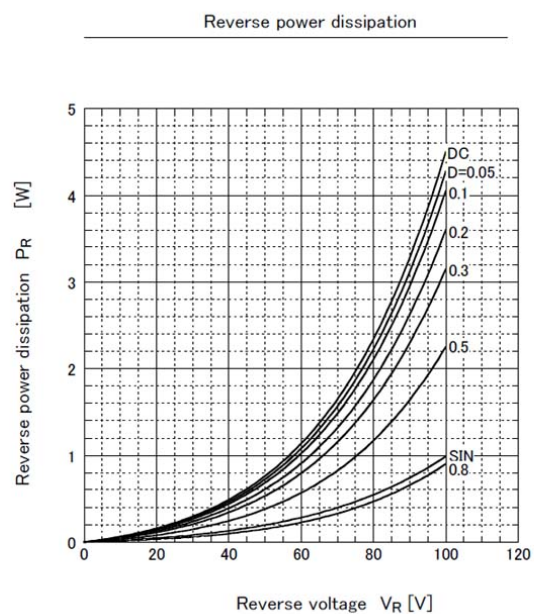
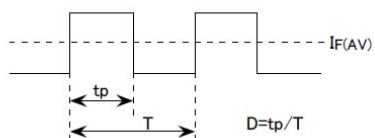
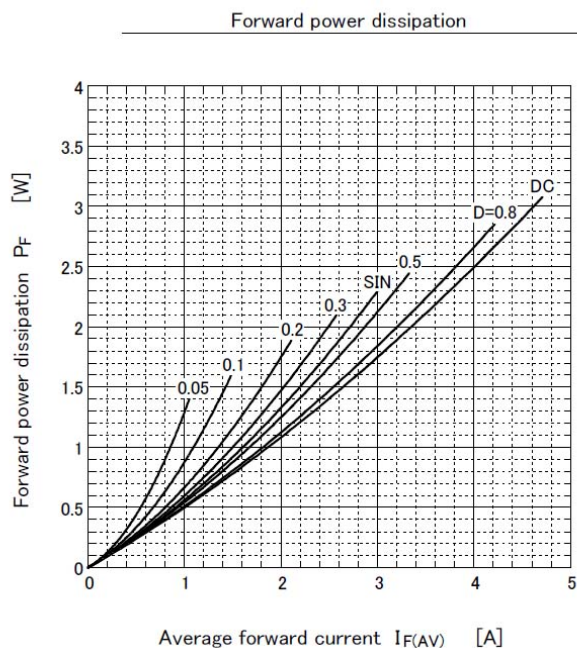
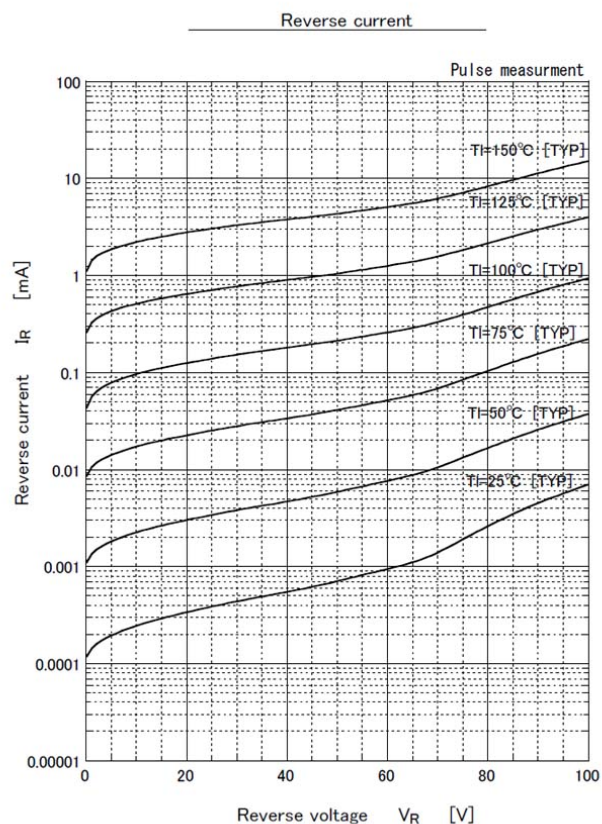
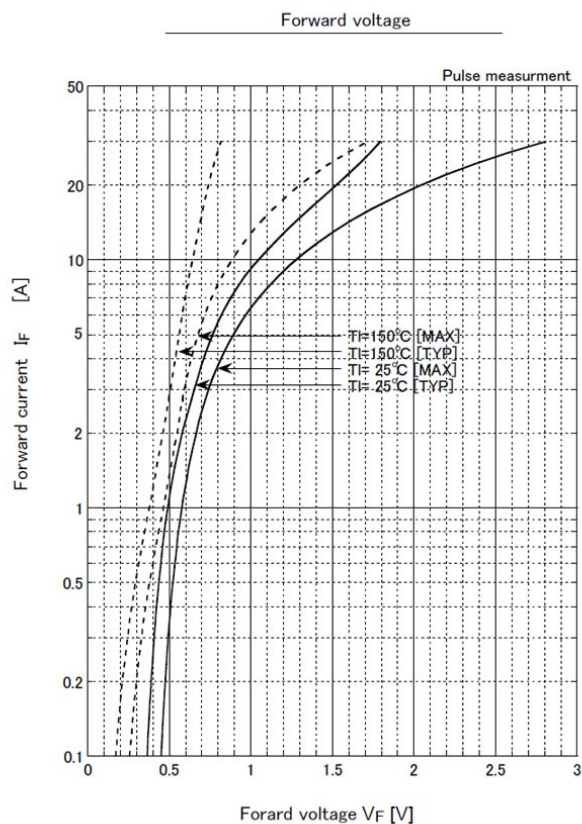
※ :See the original Specifications

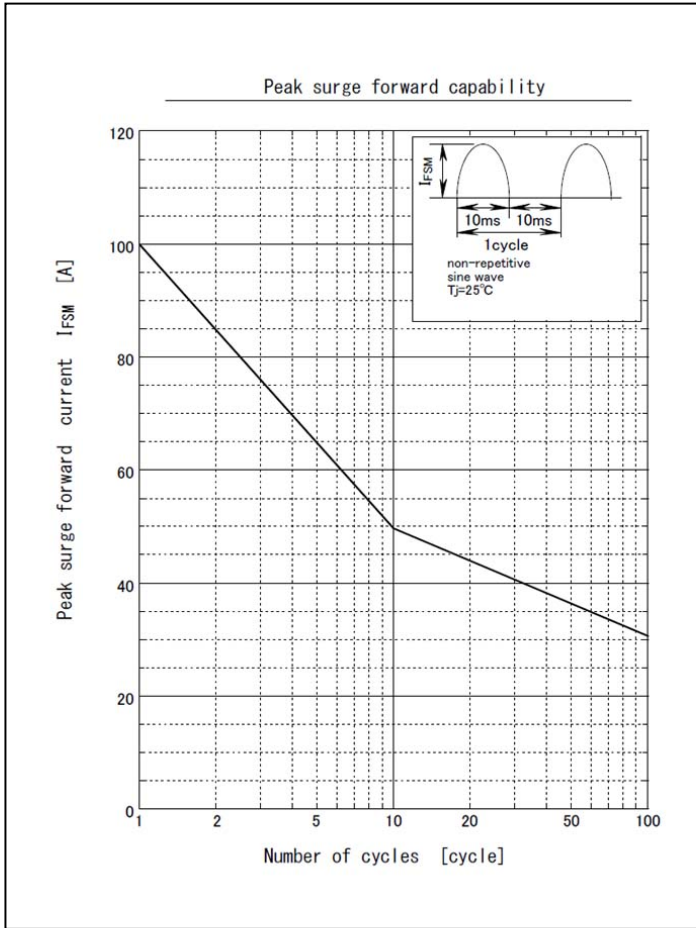
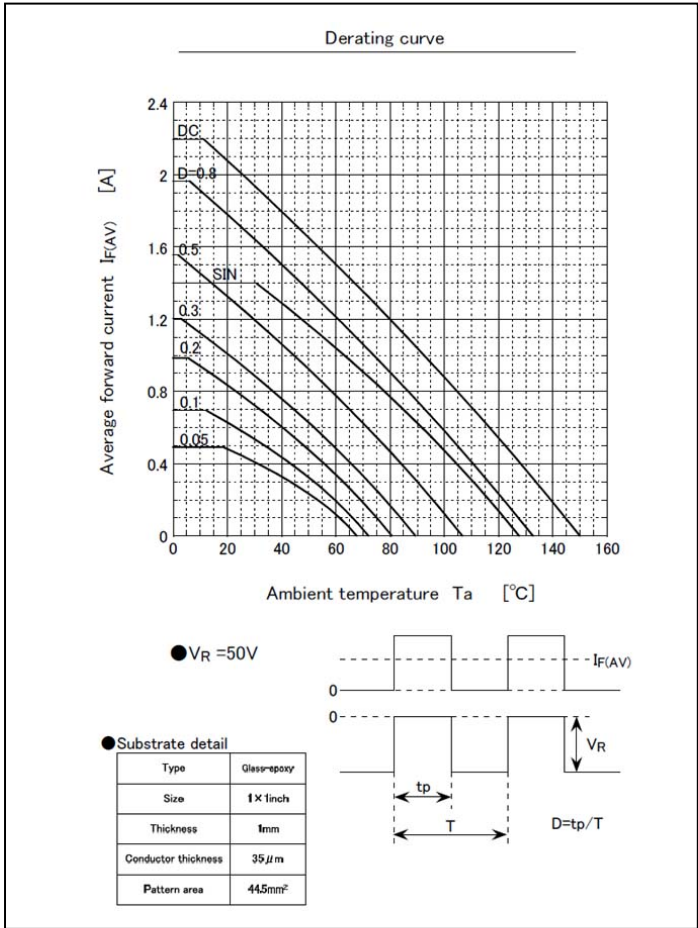
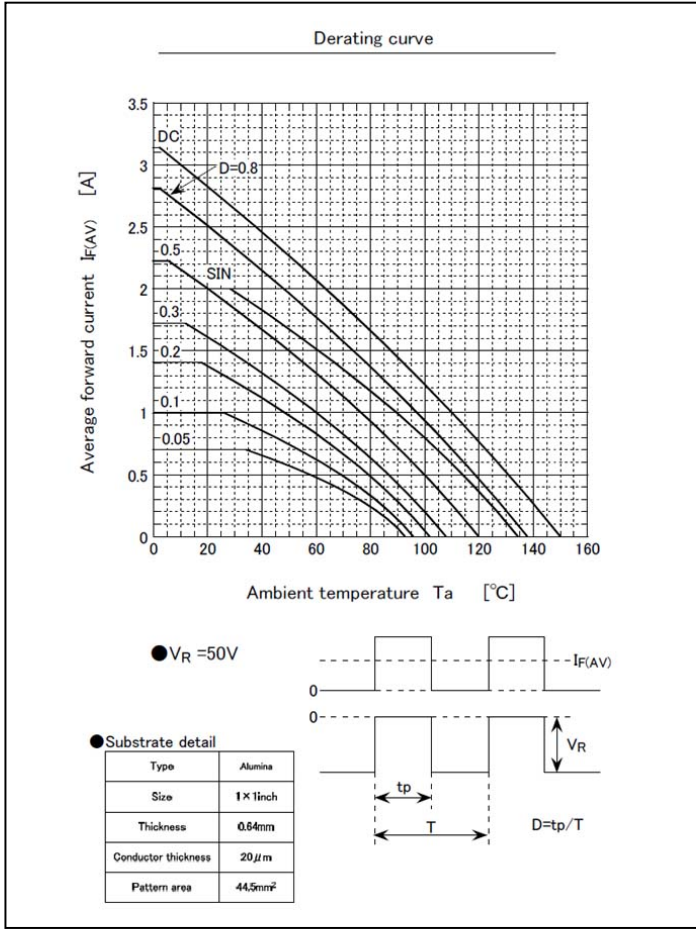
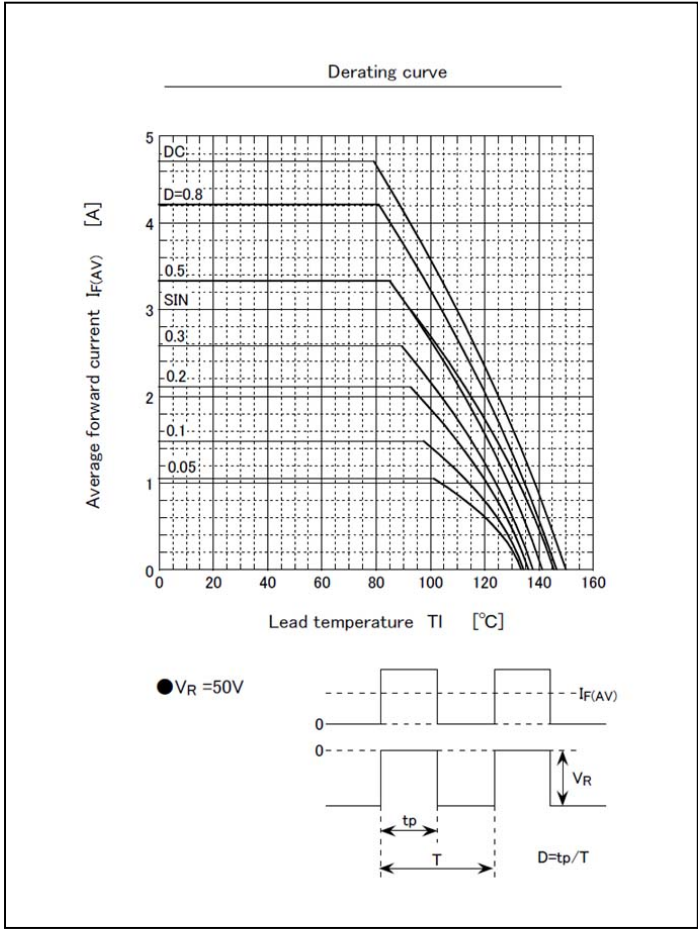
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=3A, Pulse measurement			0.74	V
Reverse current	I_R	VR=100V, Pulse measurement			0.4	mA
Total capacitance	C_t	f=1MHz, VR=10V		143		pF
Thermal resistance	$R_{th(j-l)}$	Junction to lead			23	°C/W
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On alumina substrate ※			80	°C/W
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate ※			115	°C/W

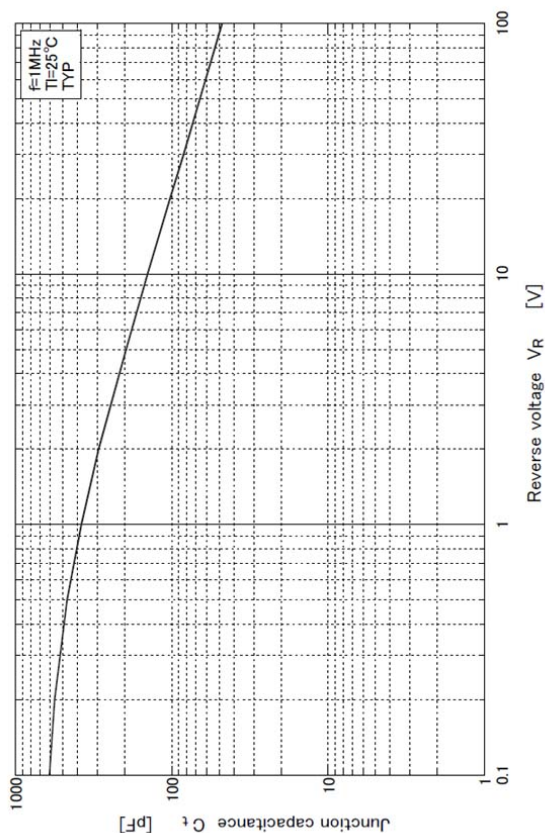
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

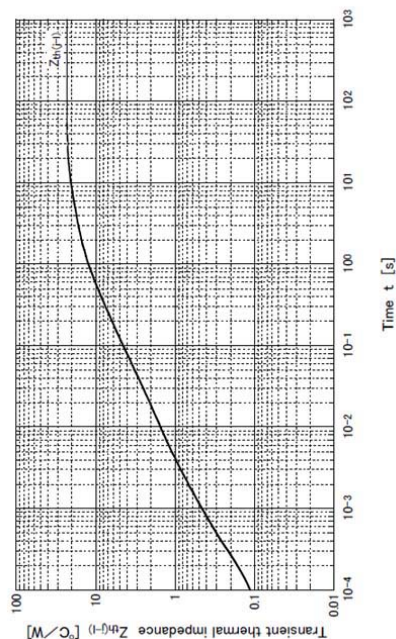




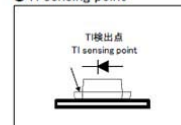
Junction capacitance



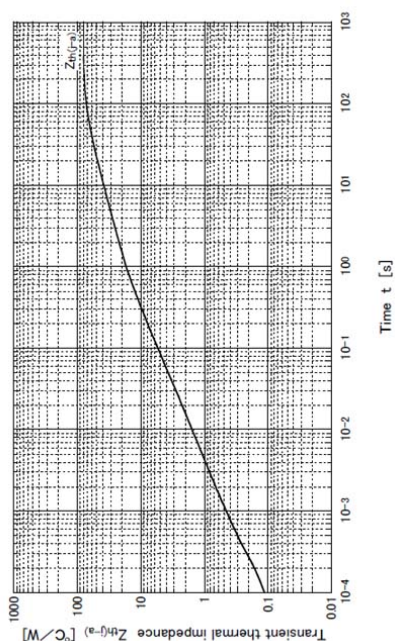
Transient thermal impedance



● TI sensing point



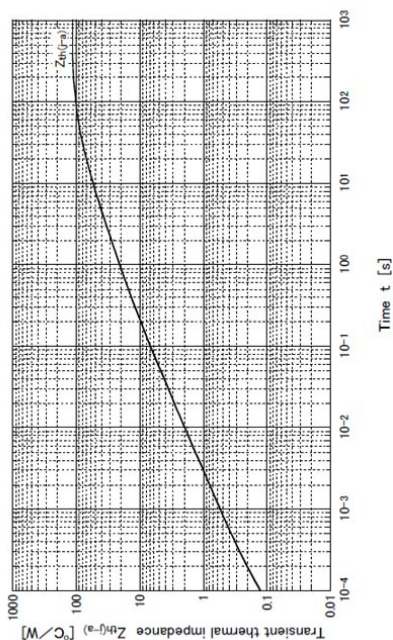
Transient thermal impedance



● Substrate detail

Type	Alumina
Size	1 X 1inch
Thickness	0.64mm
Conductor thickness	20 μm
Pattern area	44.5mm ²

Transient thermal impedance

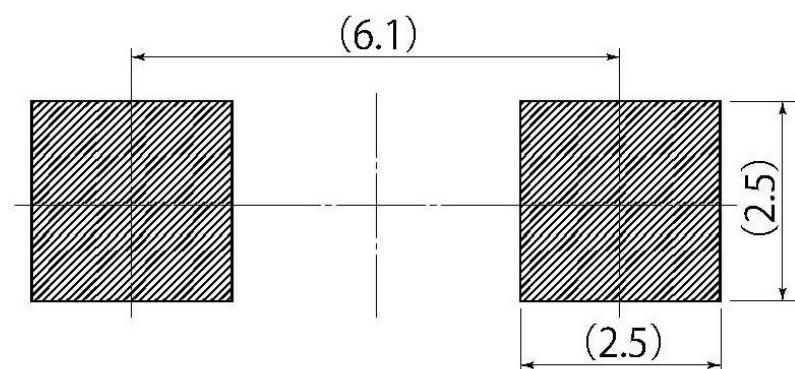
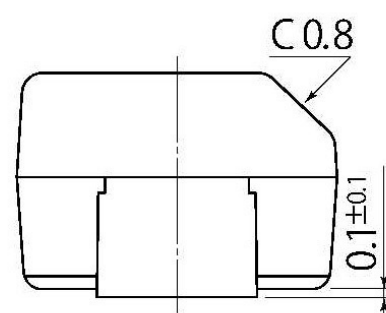
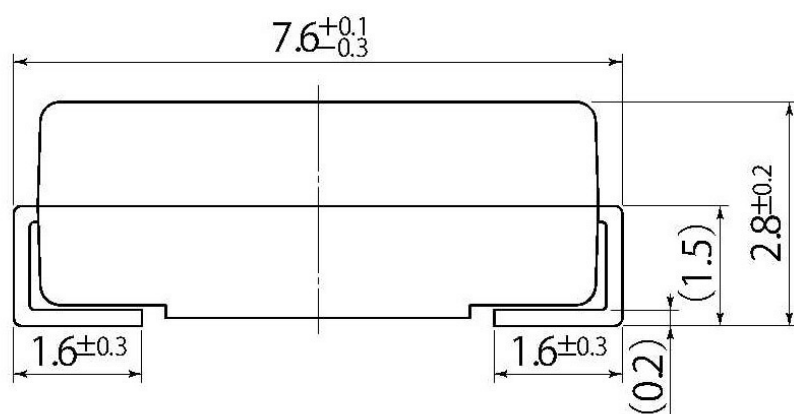
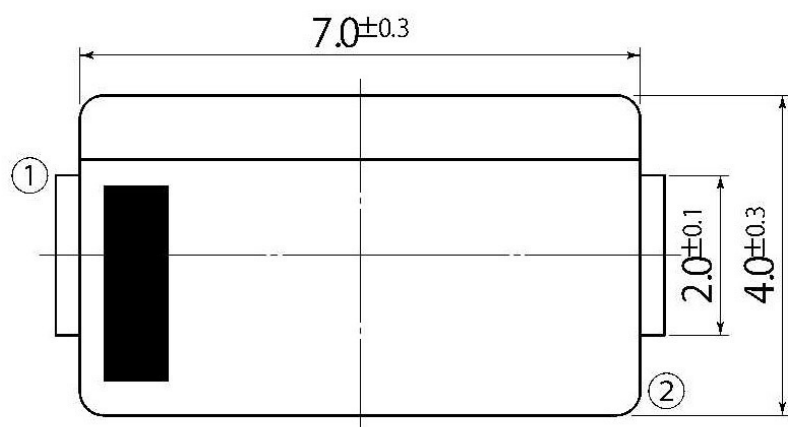


● Substrate detail

Type	Glass epoxy
Size	1 X 1inch
Thickness	1mm
Conductor thickness	35 μm
Pattern area	44.5mm ²

B9

JEDEC Code	—
JEITA Code	—
House Name	2F



Referential Soldering Pad

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

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