

D1FJ10

**Schottky Barrier Diodes
100V, 1A**

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}		100	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Tl=129°C	1	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On alumina substrate, Ta=52°C ※	1	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=36°C ※	0.8	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	50	A

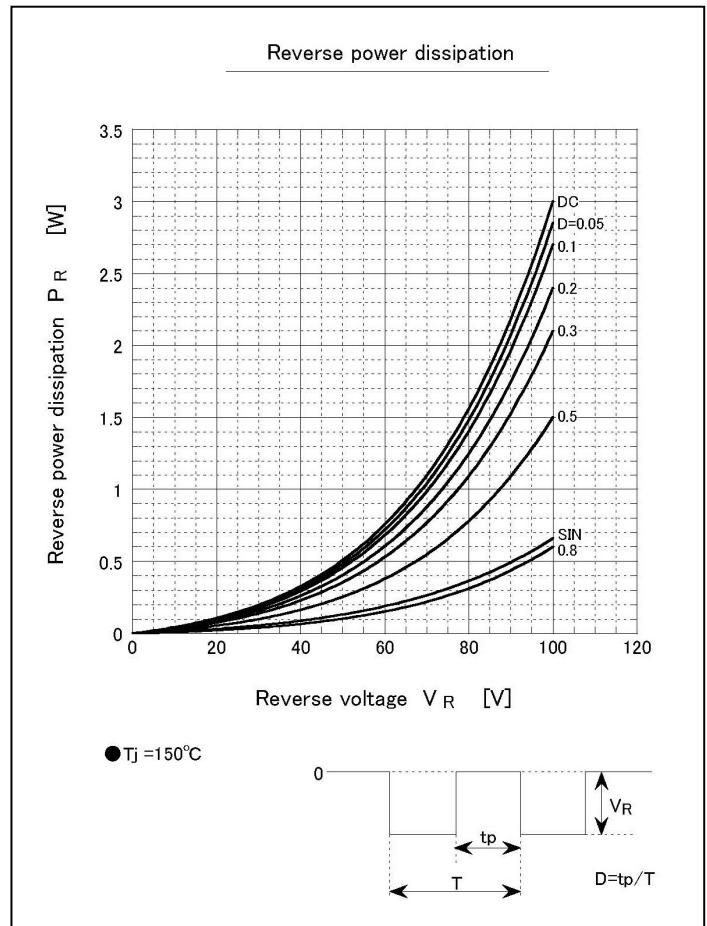
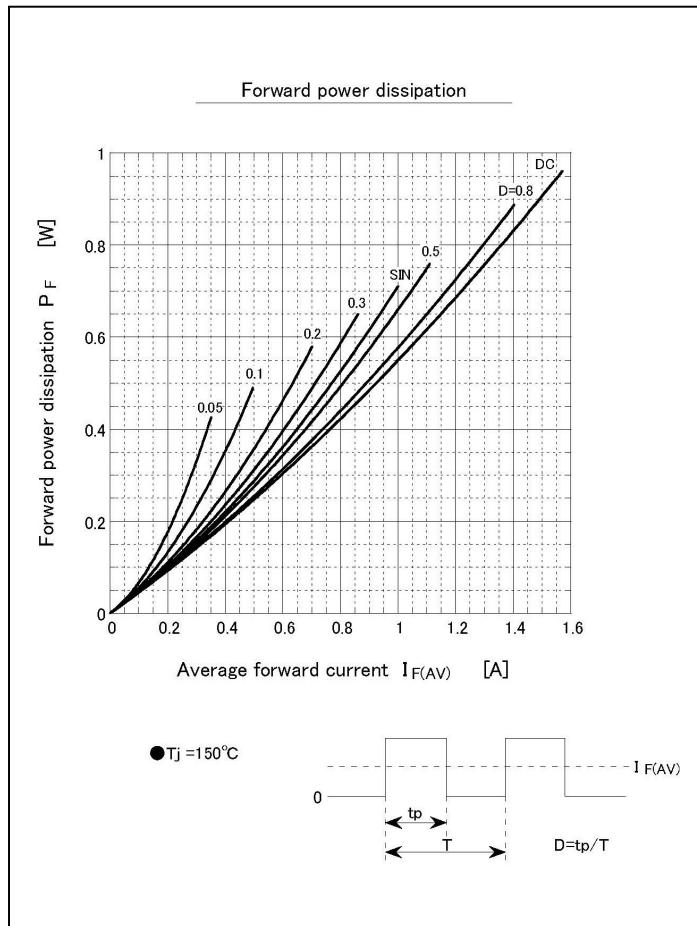
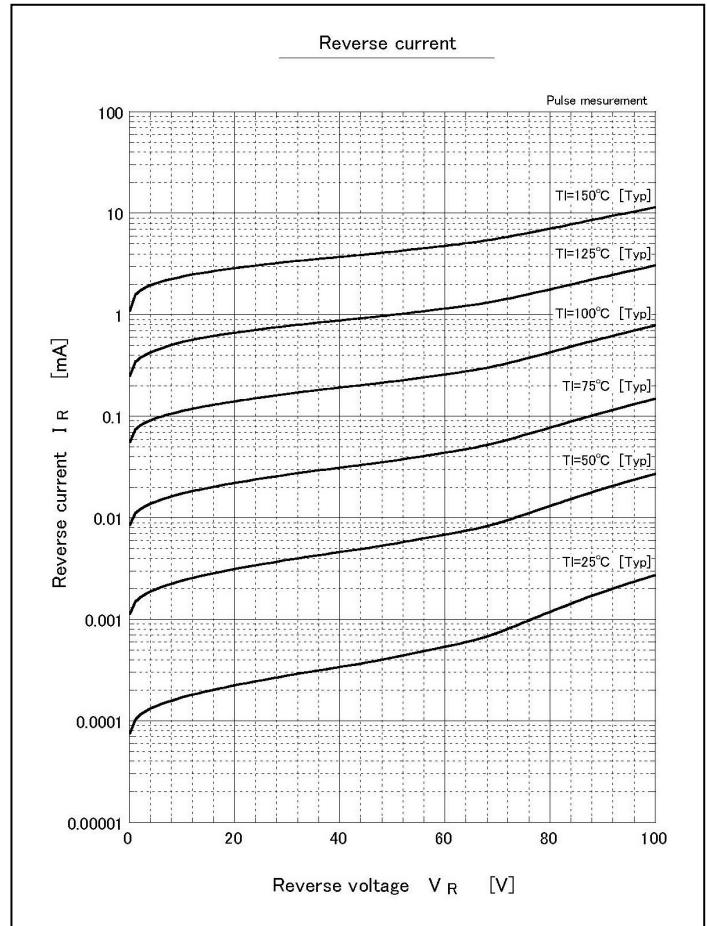
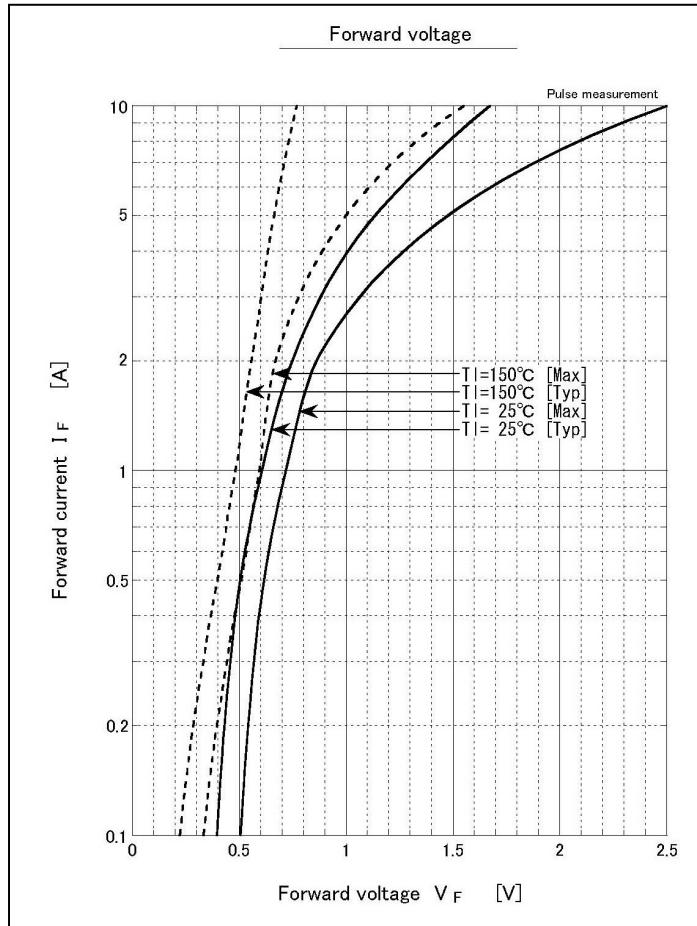
※ : See the original Specifications

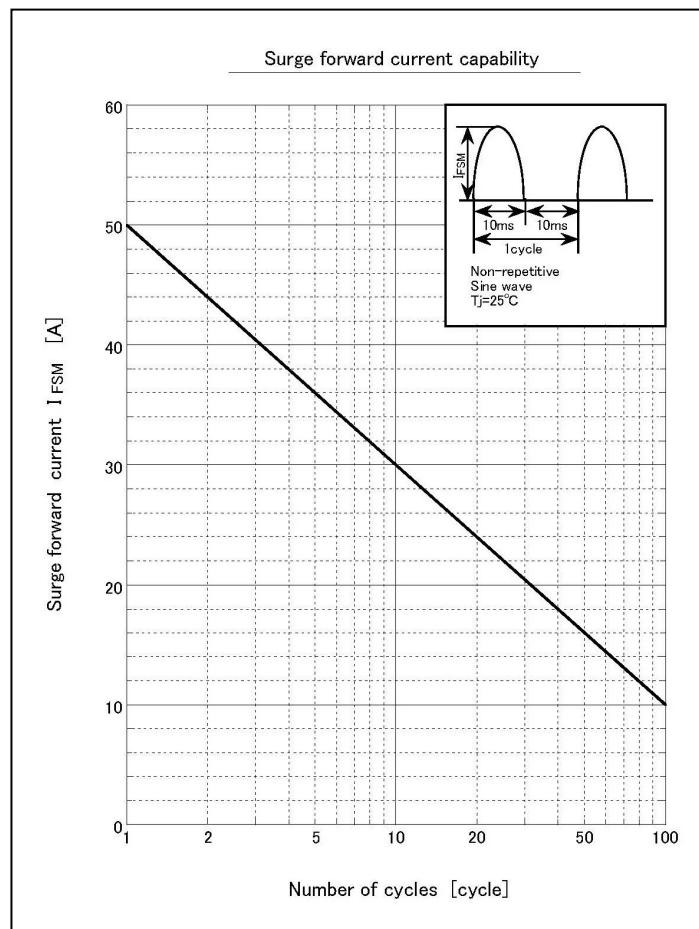
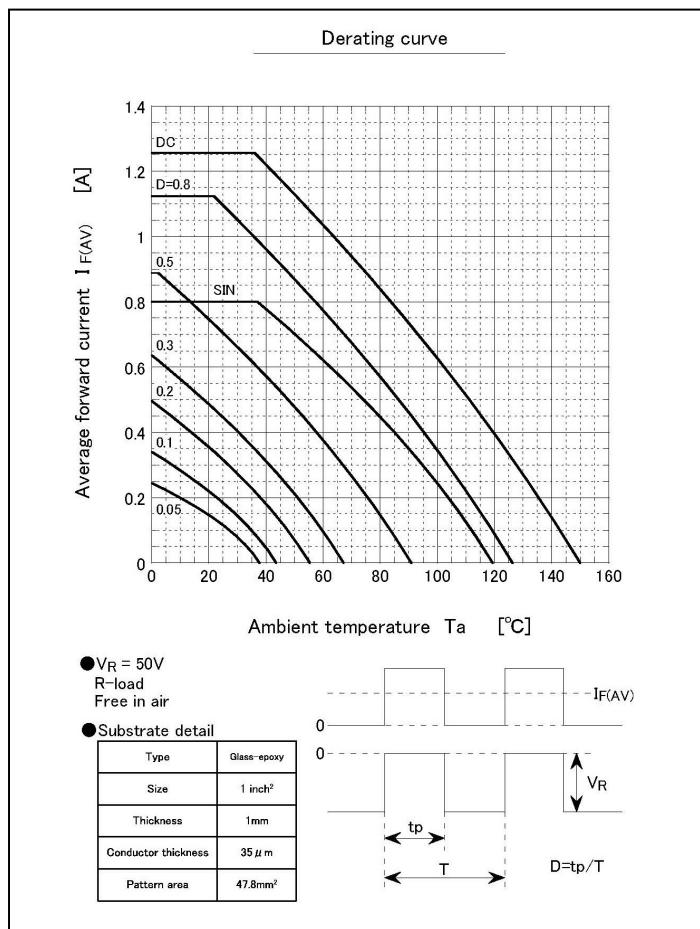
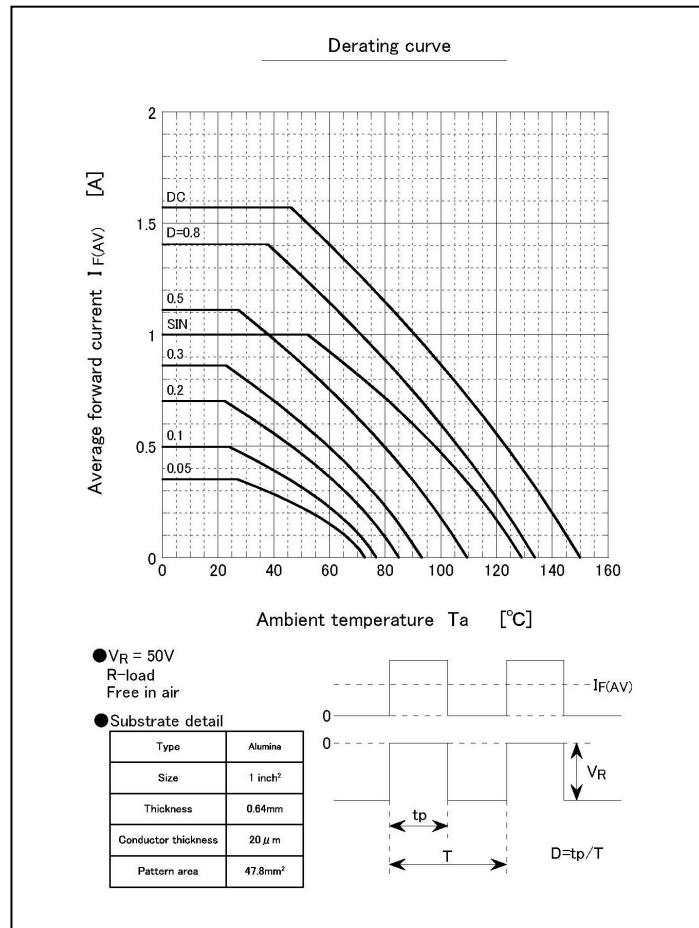
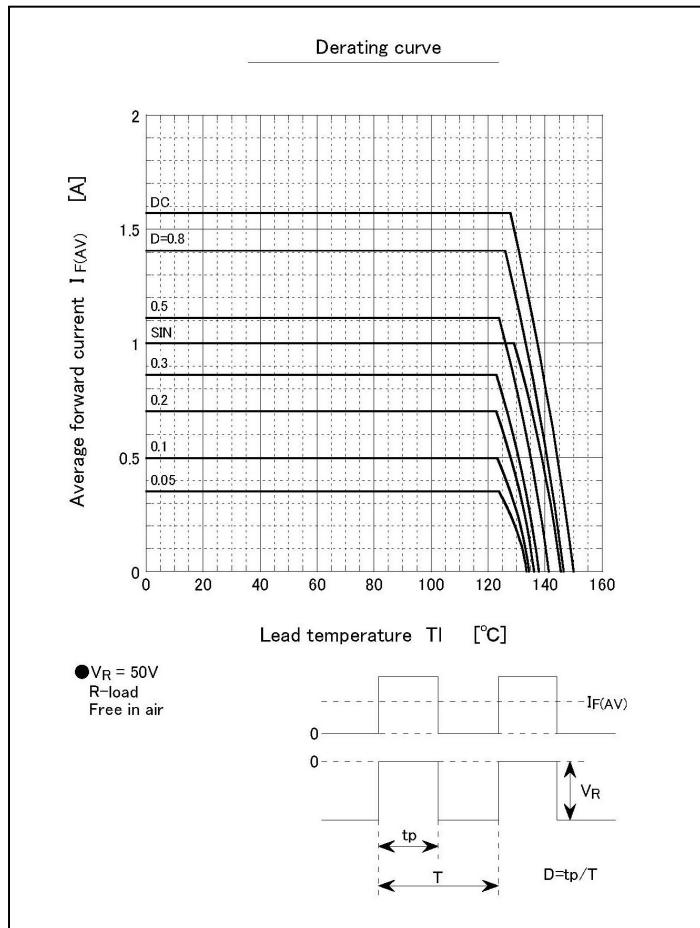
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=1A, Pulse measurement			0.72	V
Reverse current	I_R	VR=100V, Pulse measurement			0.2	mA
Total capacitance	C_t	f=1MHz, VR=10V		63		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	※		108	°C/W
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate	※		157	°C/W

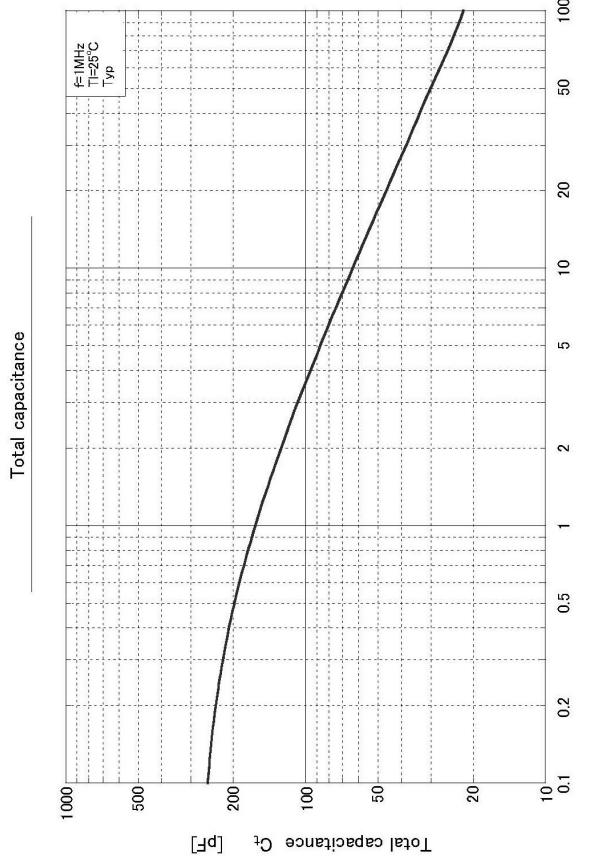
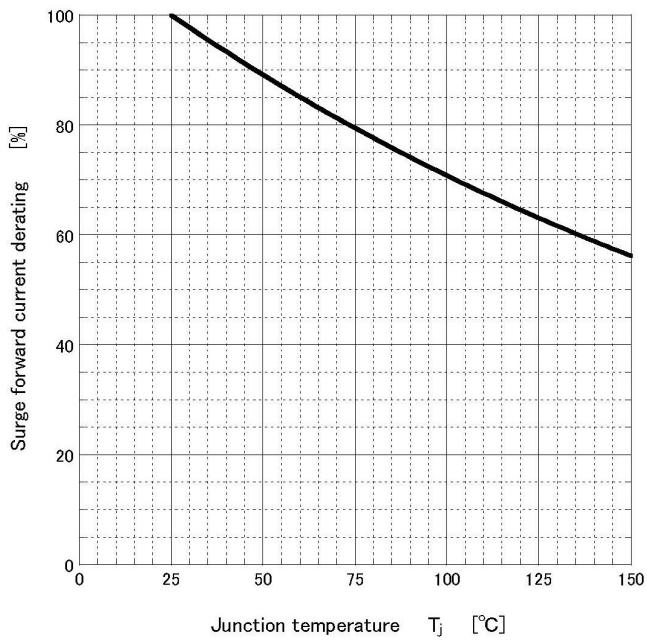
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

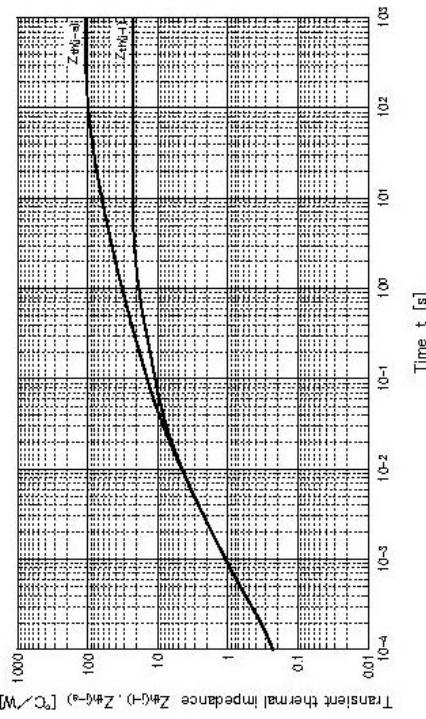




Surge forward current derating
vs Junction temperature



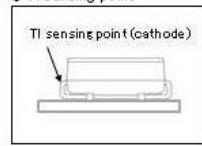
Transient thermal impedance



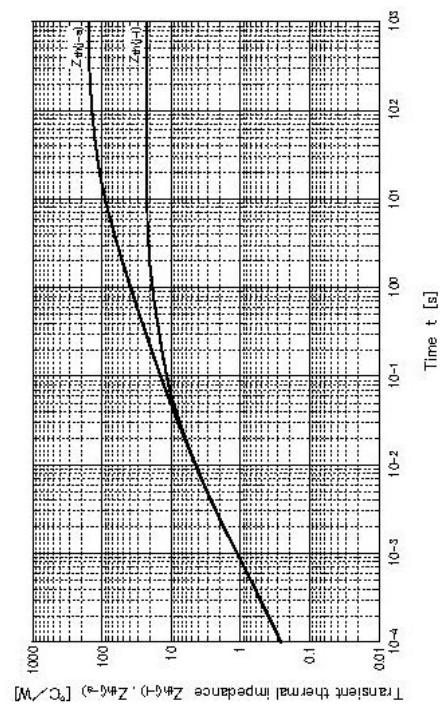
Substrate detail

Type	Alumina
Size	1 inch ²
Thickness	0.6mm
Conductor thickness	20 μm
Pattern area	47.0mm ²

TI sensing point



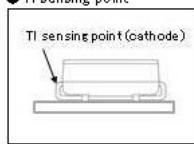
Transient thermal impedance



Substrate detail

Type	Glass-epoxy
Size	1 inch ²
Thickness	1 mm
Conductor thickness	35 μm
Pattern area	47.0mm ²

TI sensing point



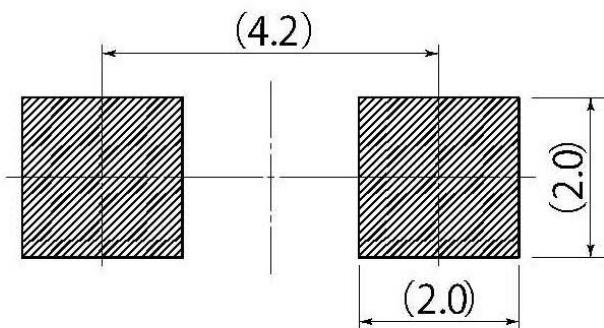
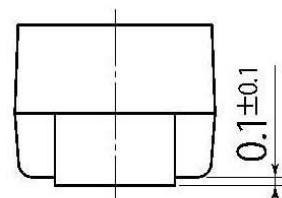
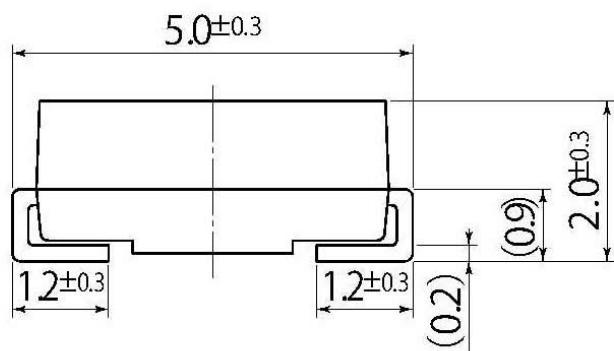
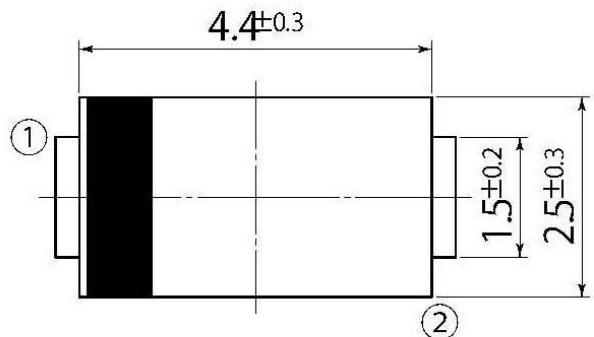
Outline Dimensions

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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