

D1FT10

**Schottky Barrier Diodes
100V, 2A**

Feature

- Small SMD
- $T_j=175^\circ\text{C}$
- Ultra low I_R
- 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 : $T_l=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T_{stg}		-55 to 175	°C
Junction temperature	T_j		175	°C
Repetitive peak reverse voltage	V_{RRM}		100	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, $T_l=136^\circ\text{C}$	2	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, On alumina substrate, $T_a=25^\circ\text{C}$	1.74	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, On glass-epoxy substrate, $T_a=25^\circ\text{C}$	1.31	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, $T_j=25^\circ\text{C}$	50	A

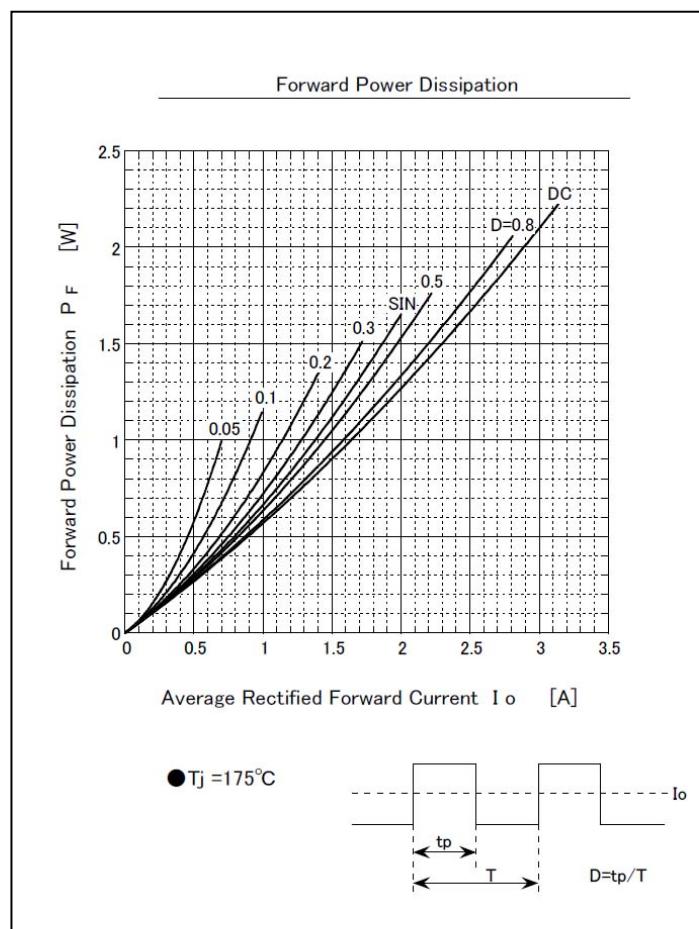
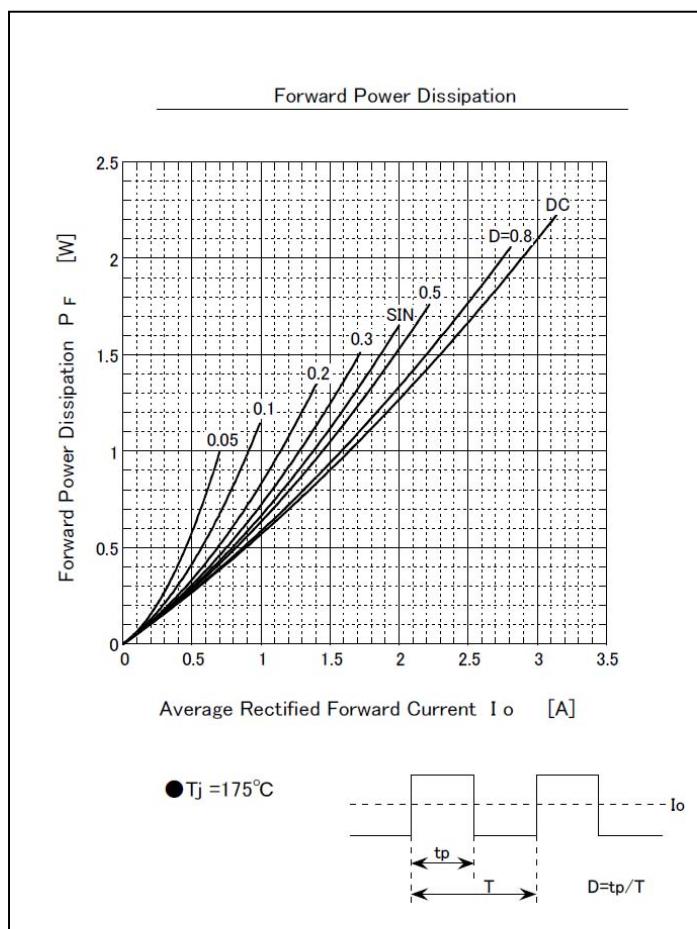
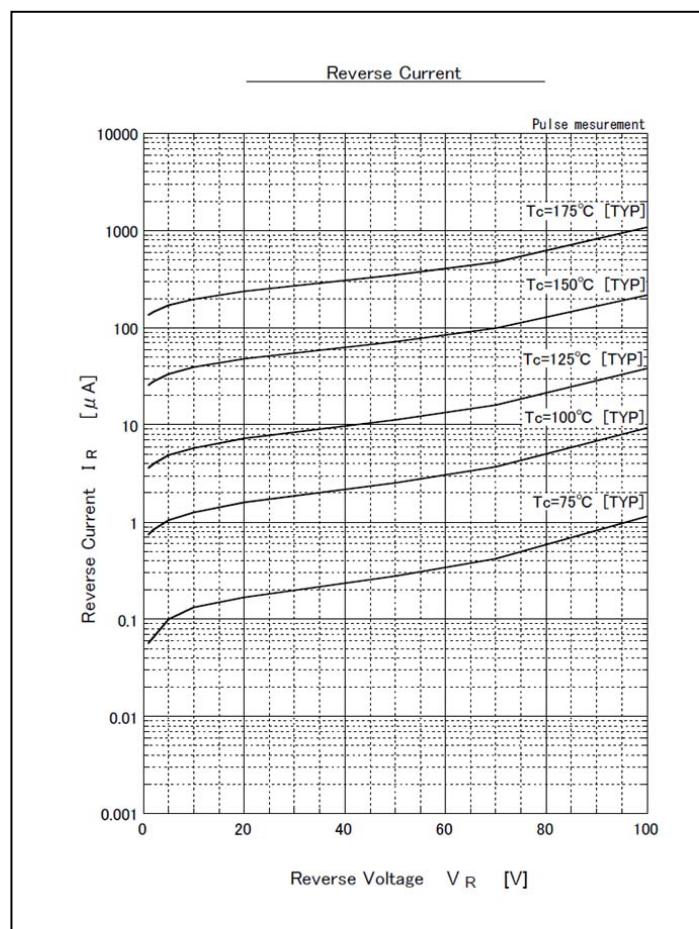
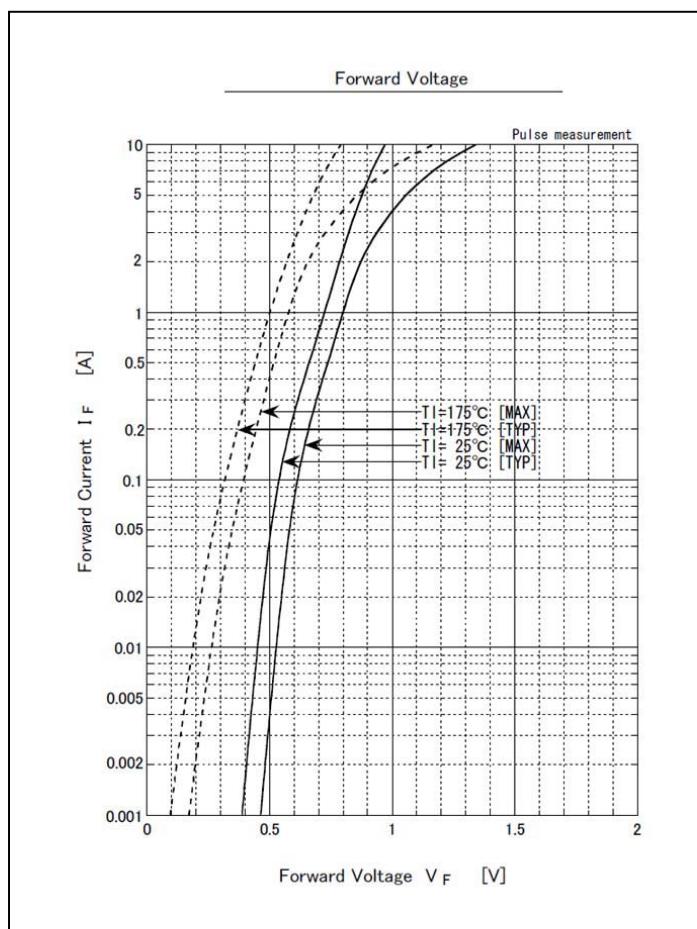
※ :See the original Specifications

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

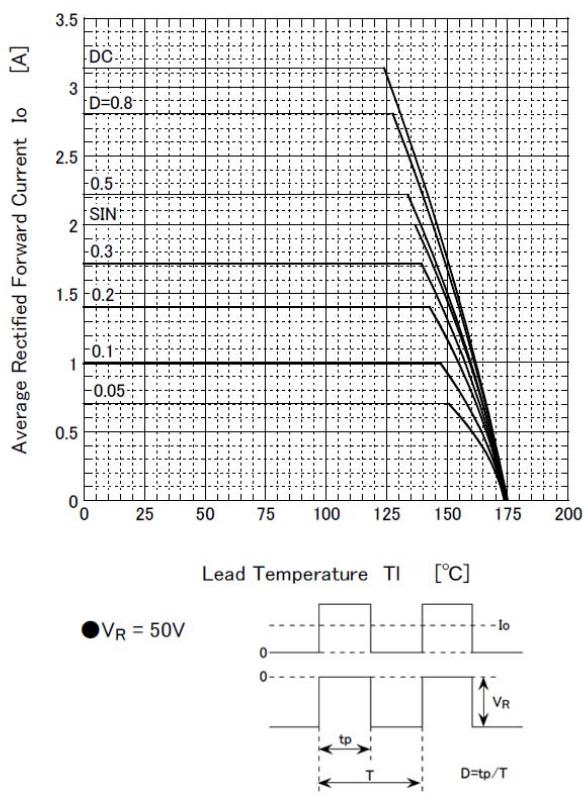
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=2A, Pulse measurement			0.86	V
Forward voltage	V_F	IF=1A, Pulse measurement			0.8	V
Reverse current	I_R	VR=100V, Pulse measurement			0.005	mA
Total capacitance	C_t	f=1MHz, VR=10V		40		pF
Thermal resistance	$R_{th(j-l)}$	Junction 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

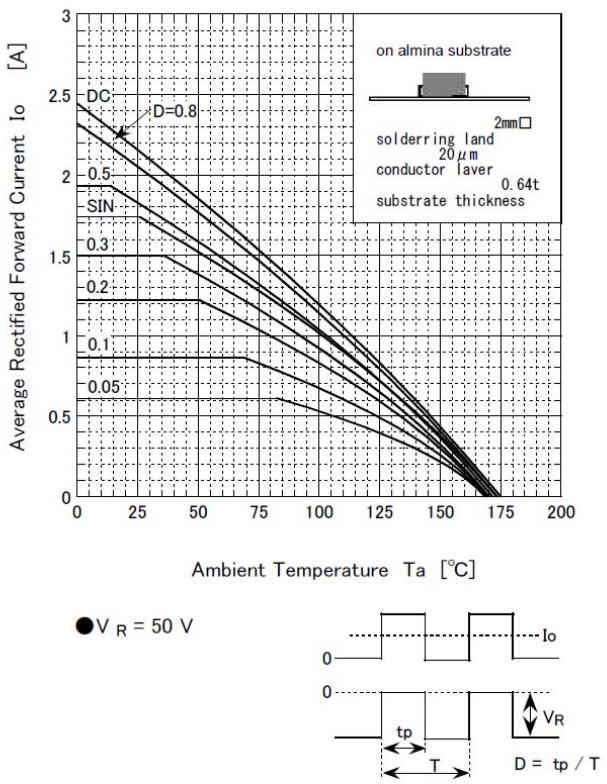
CHARACTERISTIC DIAGRAMS



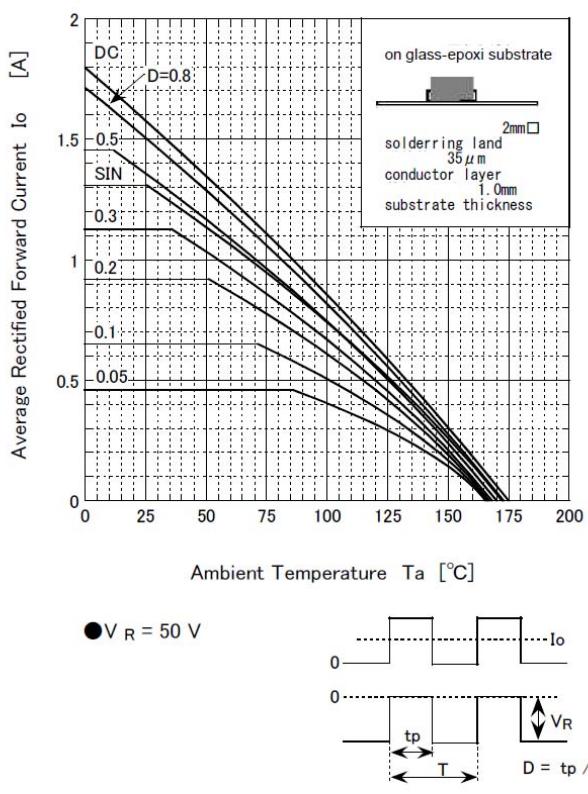
Derating Curve



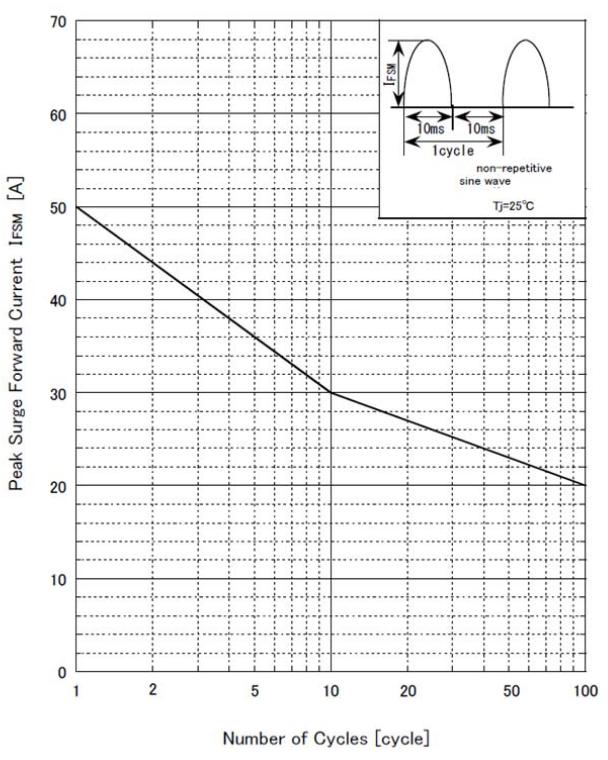
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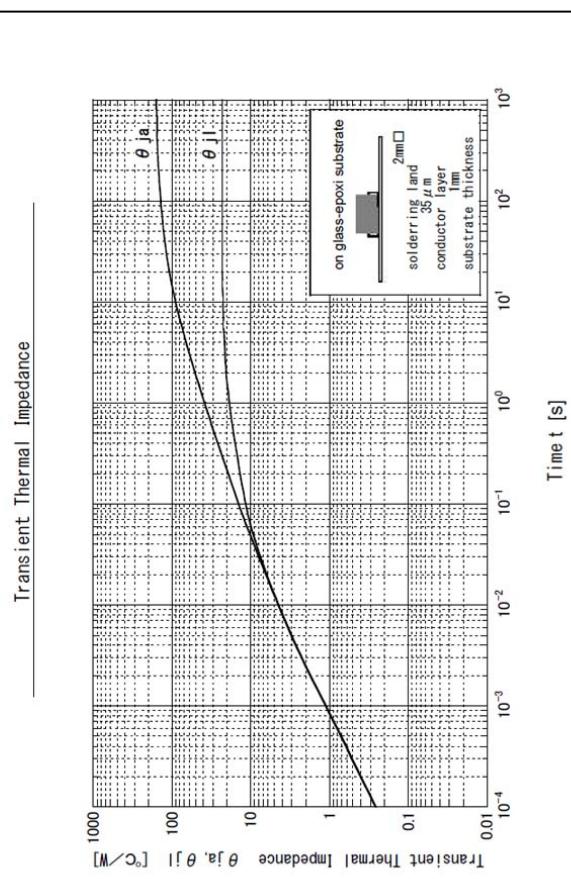
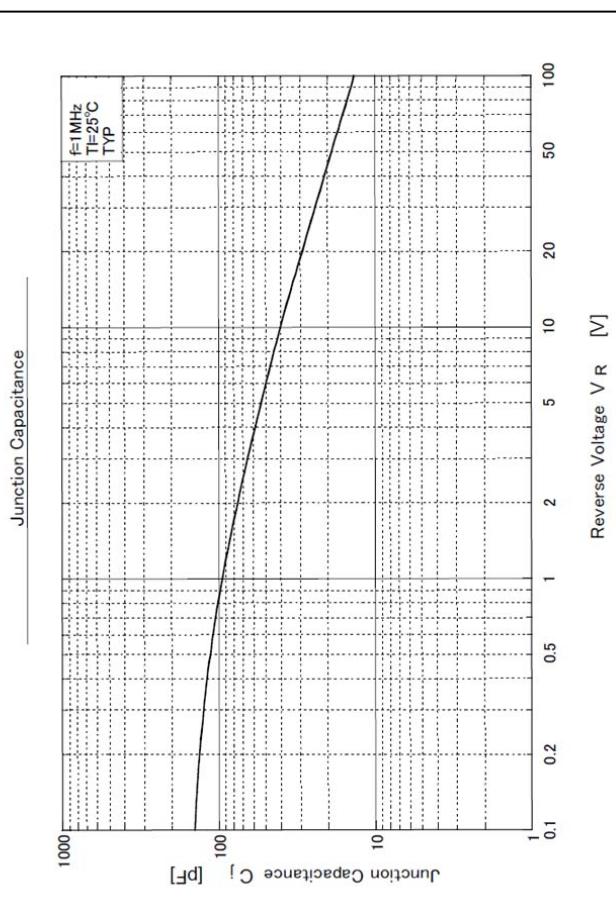
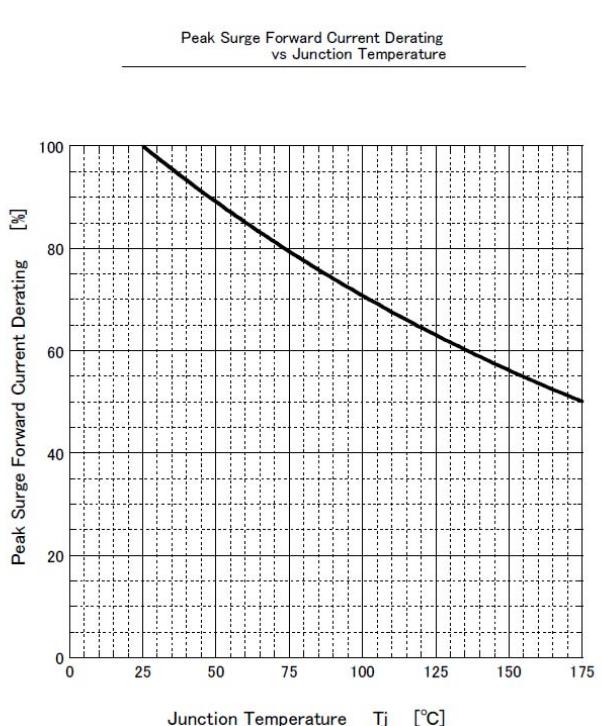
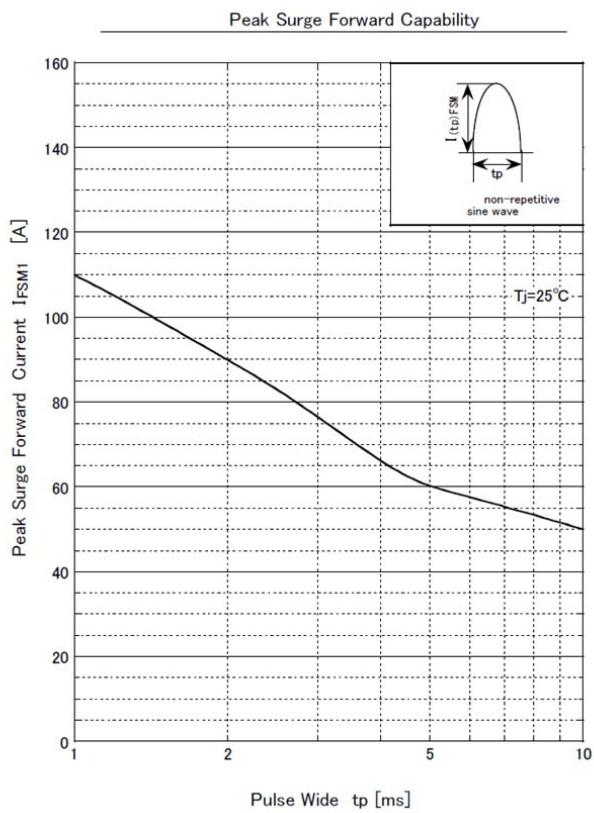


Derating Curve

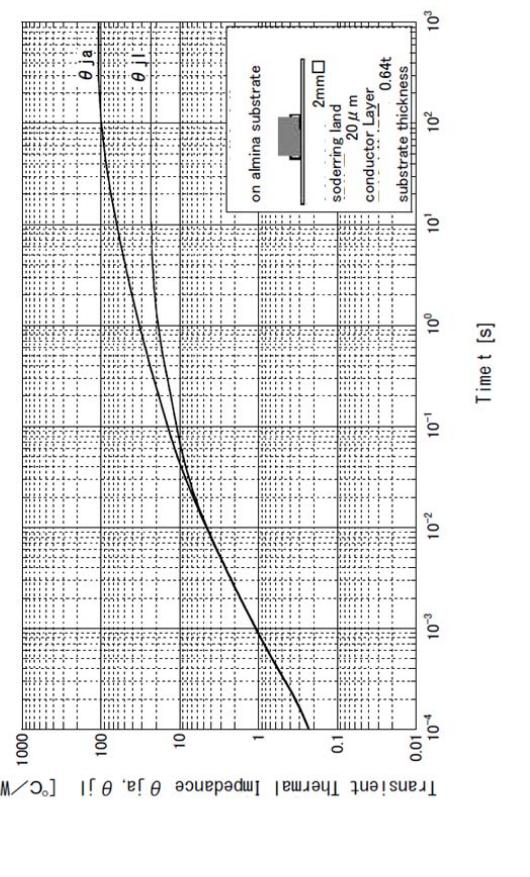


Peak Surge Forward Capability





Transient Thermal Impedance



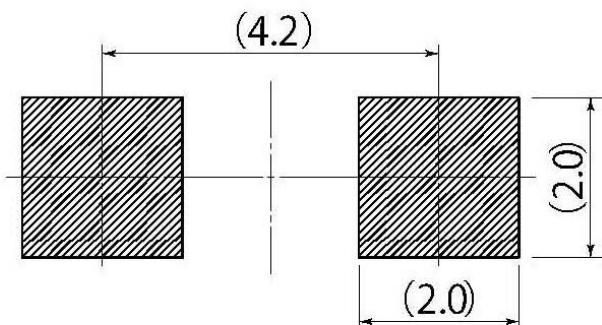
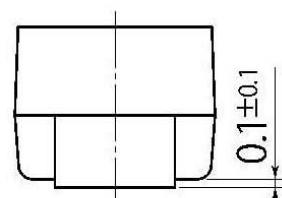
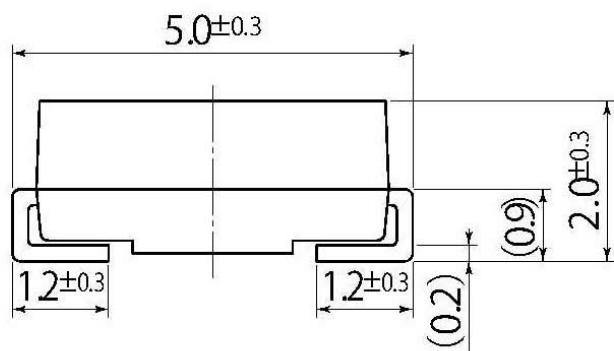
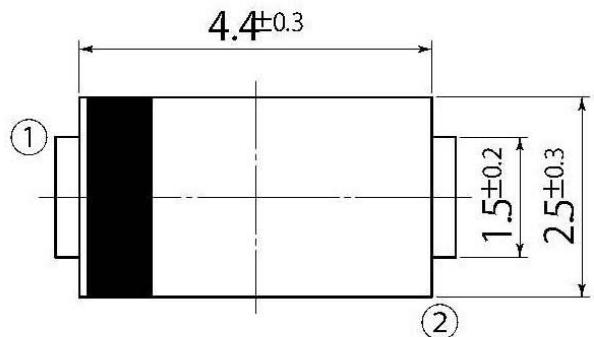
Outline Dimensions

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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