

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, 1 cycle, Peak value, T _j =25°C	50	A

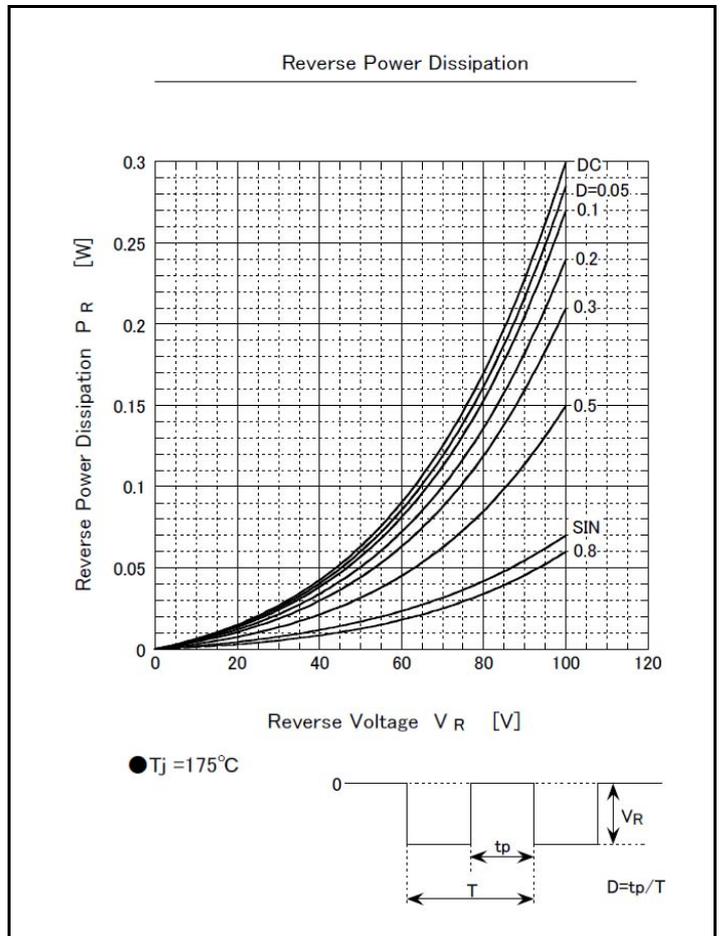
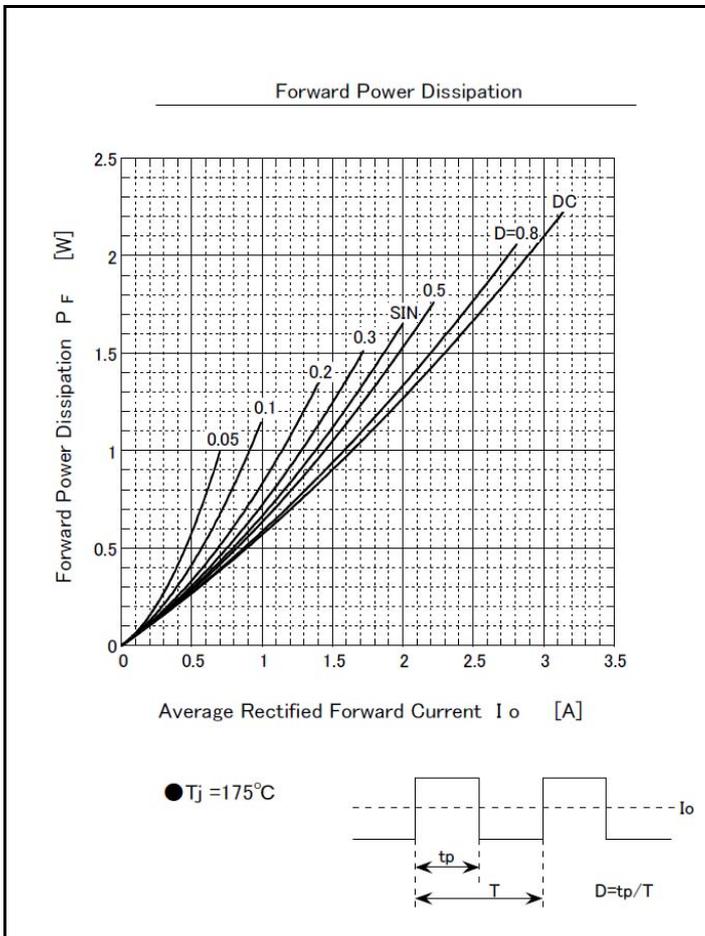
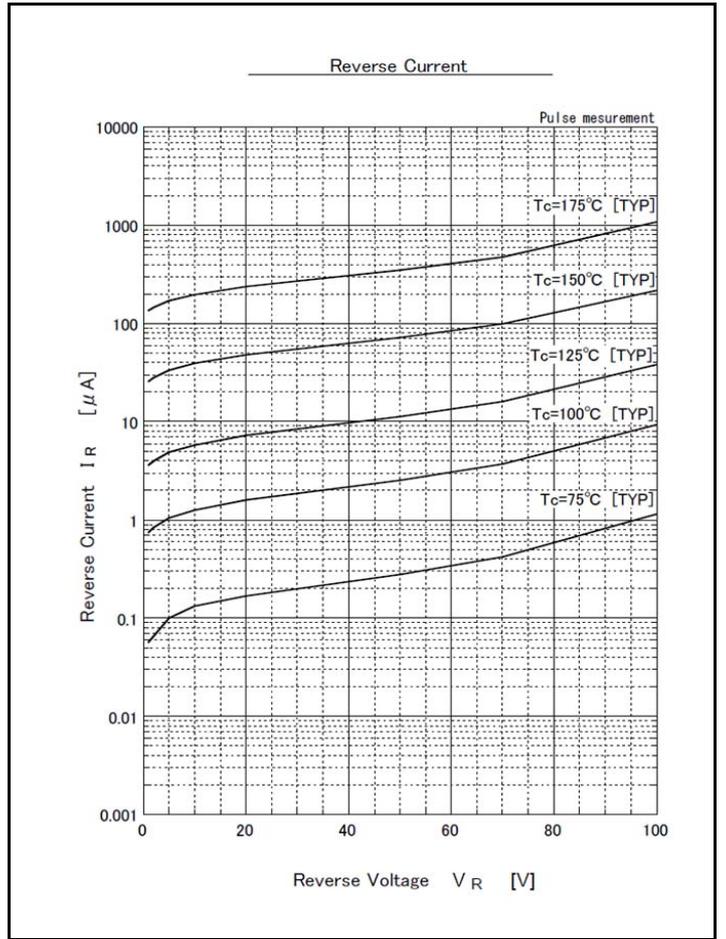
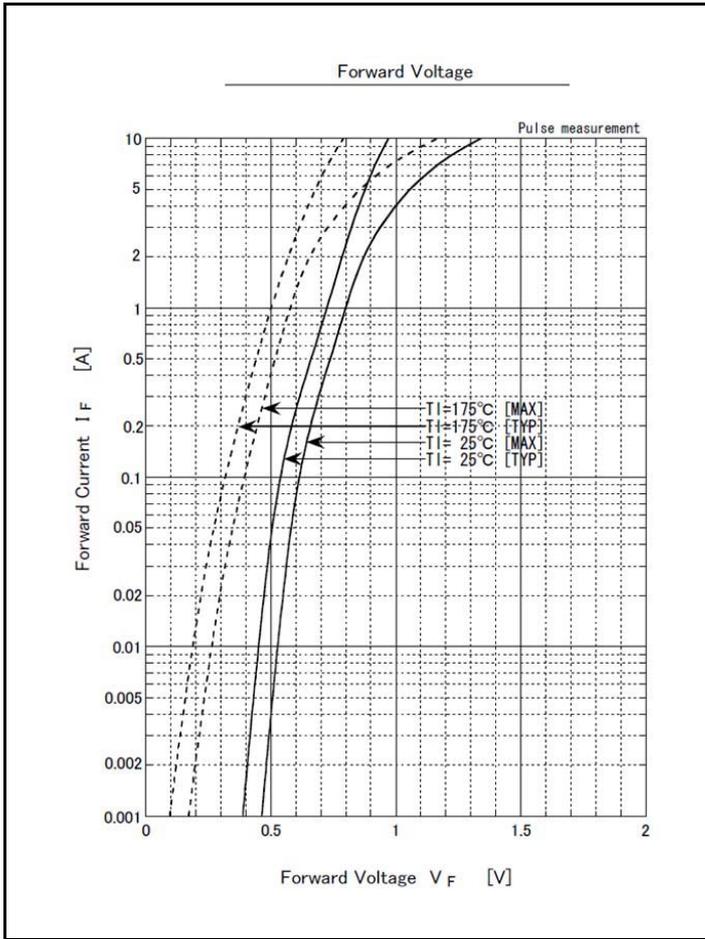
※ : See the original Specifications

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

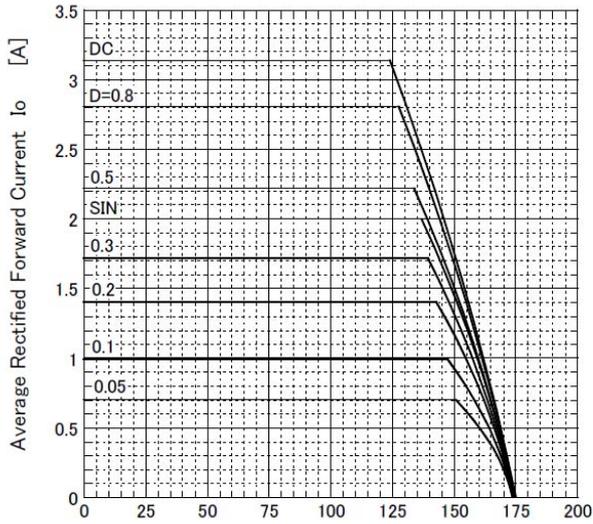
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=1A$, Pulse measurement			0.72	V
Reverse current	I_R	$V_R=100V$, Pulse measurement			0.2	mA
Total capacitance	C_t	$f=1MHz$, $V_R=10V$		63		pF
Thermal resistance	$R_{th(j-l)}$	Junction to lead			23	°C/W
Thermal resistance	$R_{th(j-a)}$	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

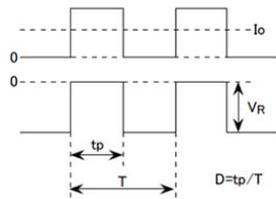


Derating Curve

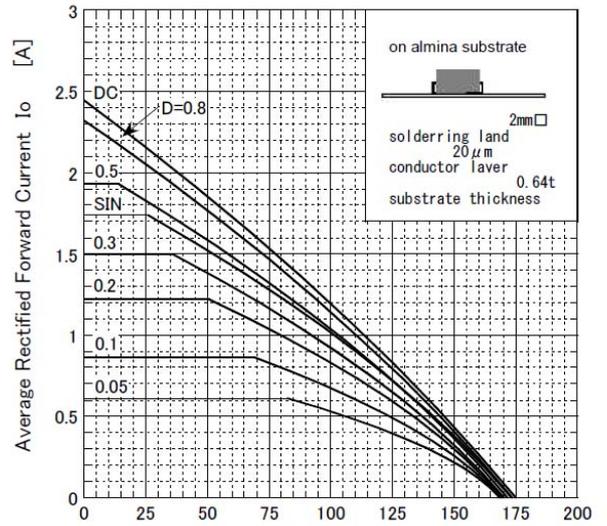


Lead Temperature T_I [°C]

● $V_R = 50V$

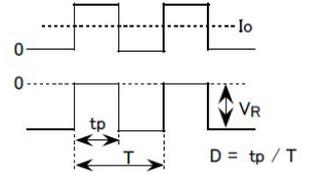


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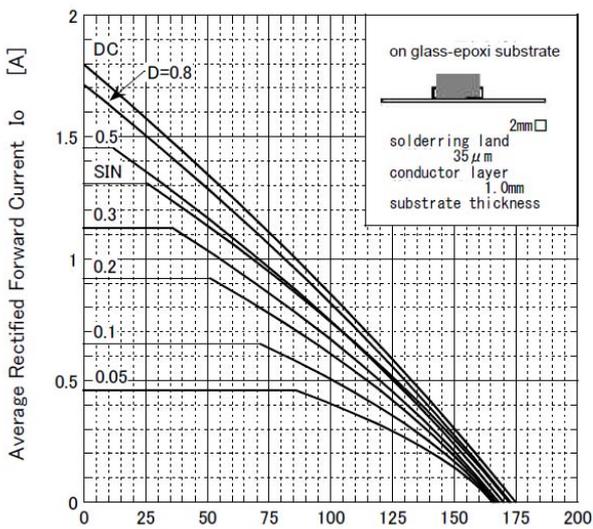


Ambient Temperature T_a [°C]

● $V_R = 50V$

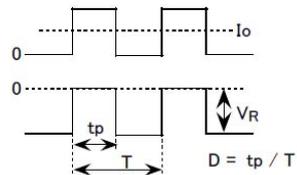


Derating Curve

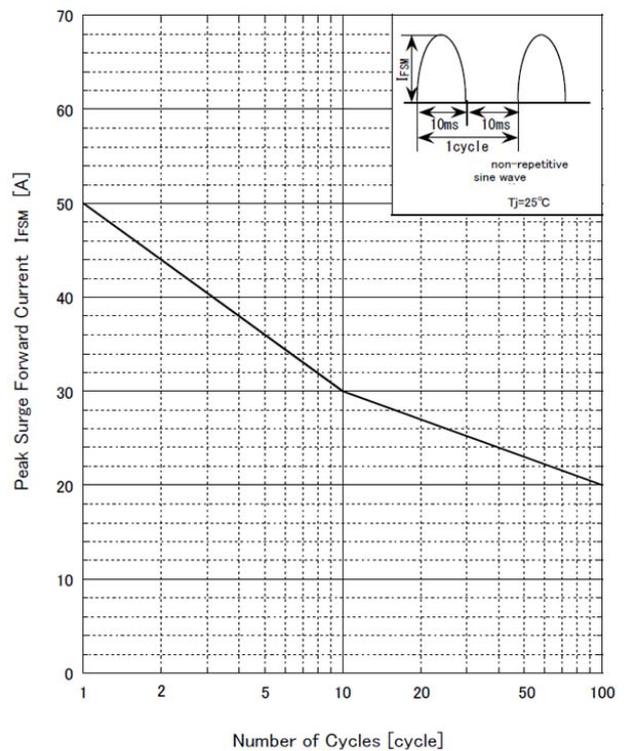


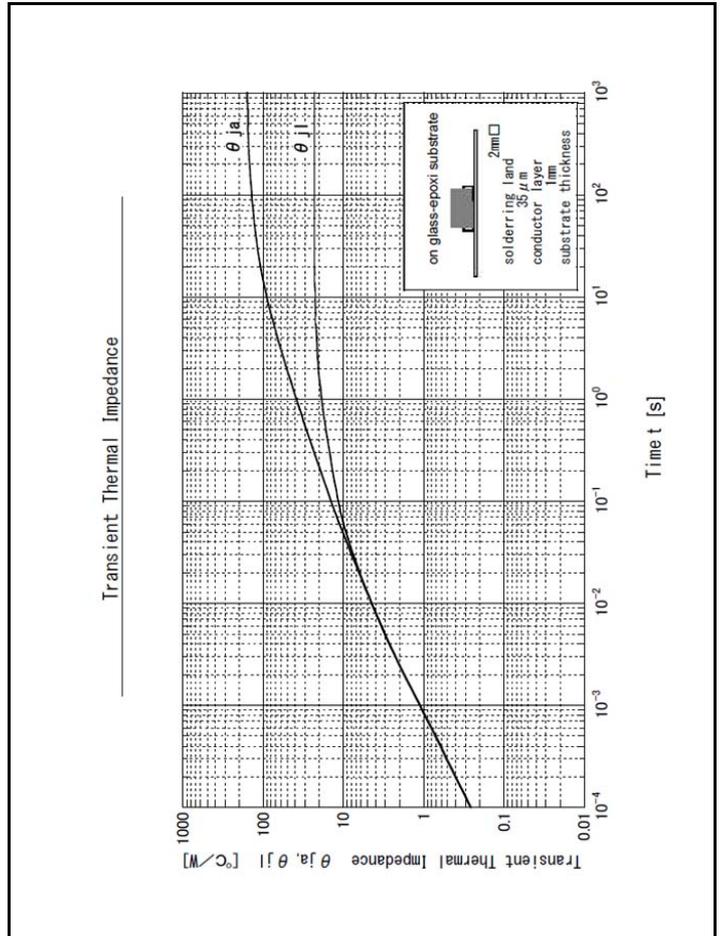
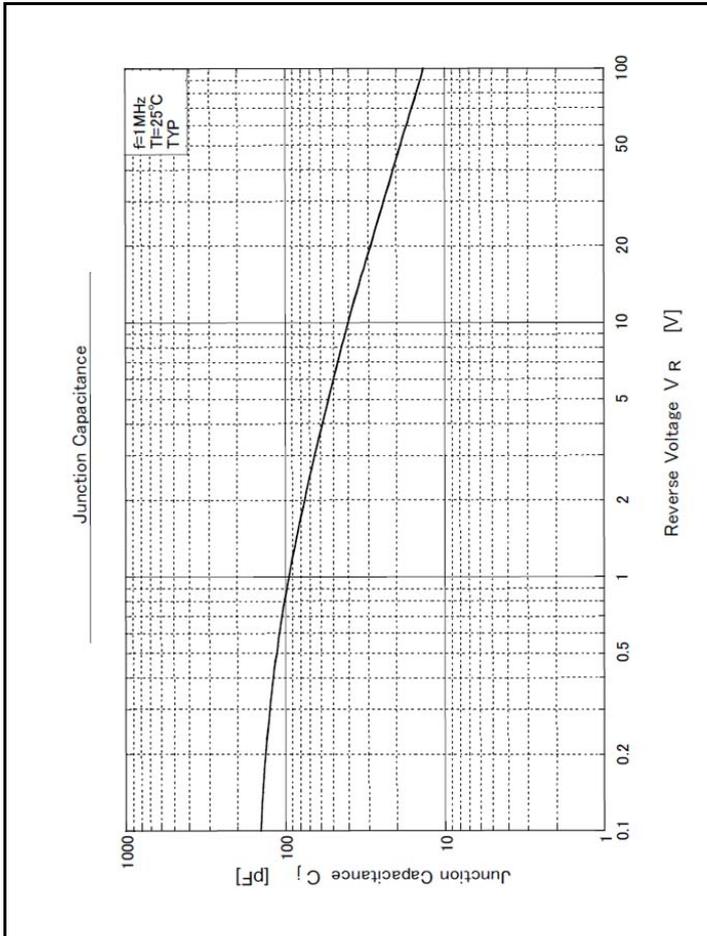
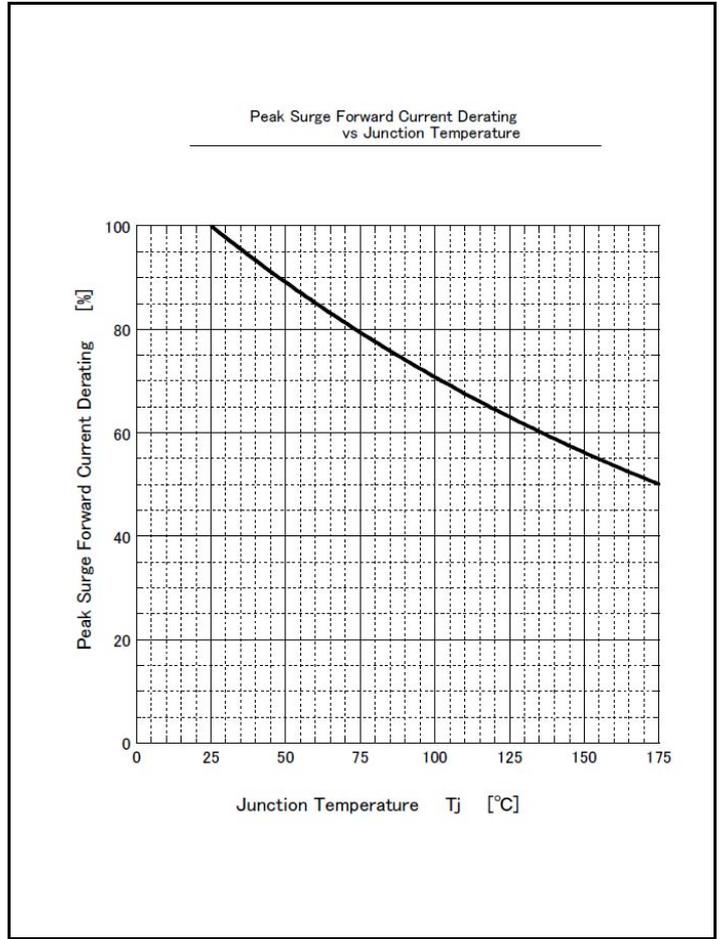
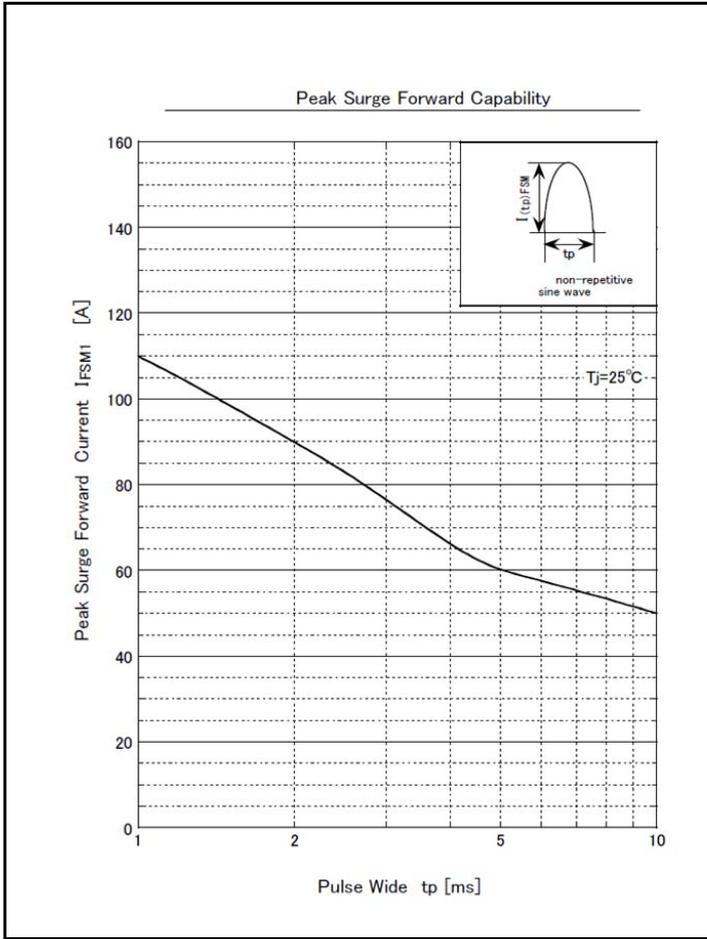
Ambient Temperature T_a [°C]

● $V_R = 50V$

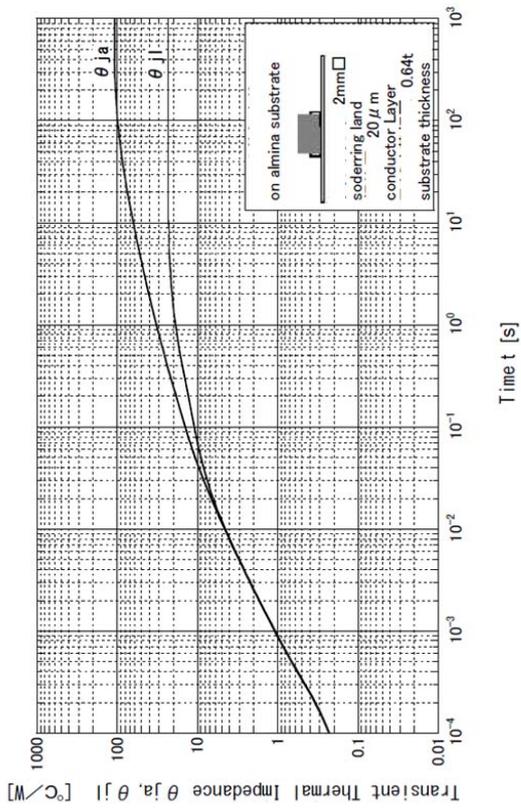


Peak Surge Forward Capability



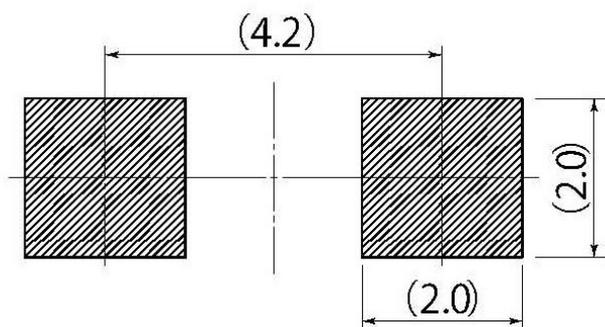
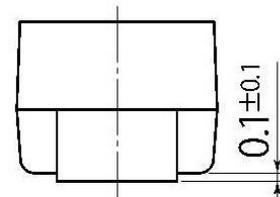
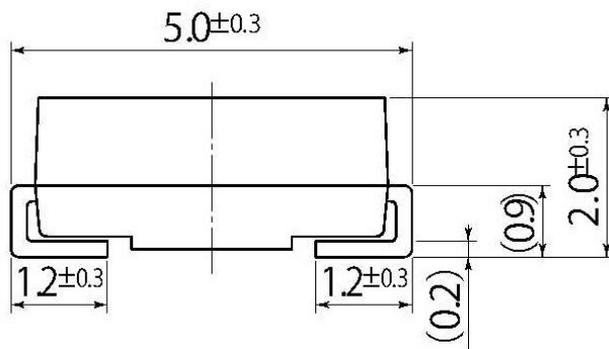
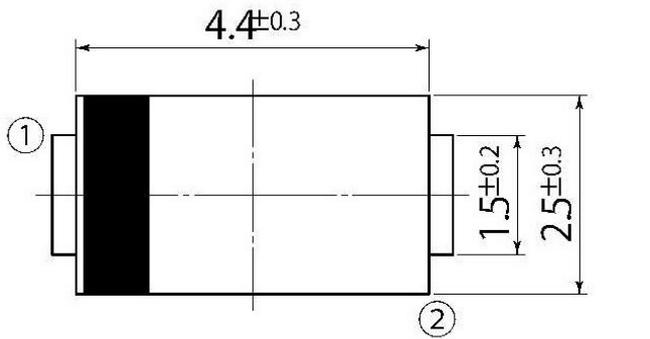


Transient Thermal Impedance



B3

JEDEC Code	DO-214AC
JEITA Code	-
House Name	1F



Referential Soldering Pad

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

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