

D1FT10

Schottky Barrier Diodes

100V, 2A

Feature

- Small SMD
- Tj=175°C
- Ultra low I_R
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

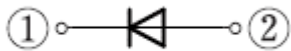
OUTLINE

Package (House Name): 1F

Package (JEDEC Code): DO-214AC



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 175	°C
Junction temperature	Tj		175	°C
Repetitive peak reverse voltage	V _{RRM}		100	V
Average forward current	I _F (AV)	50Hz sine wave, Resistance load, Tl=136°C	2	A
Average forward current	I _F (AV)	50Hz sine wave, Resistance load, On alumina substrate, Ta=25°C	1.74	A
Average forward current	I _F (AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C	1.31	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, Tj=25°C	50	A

※ :See the original Specifications

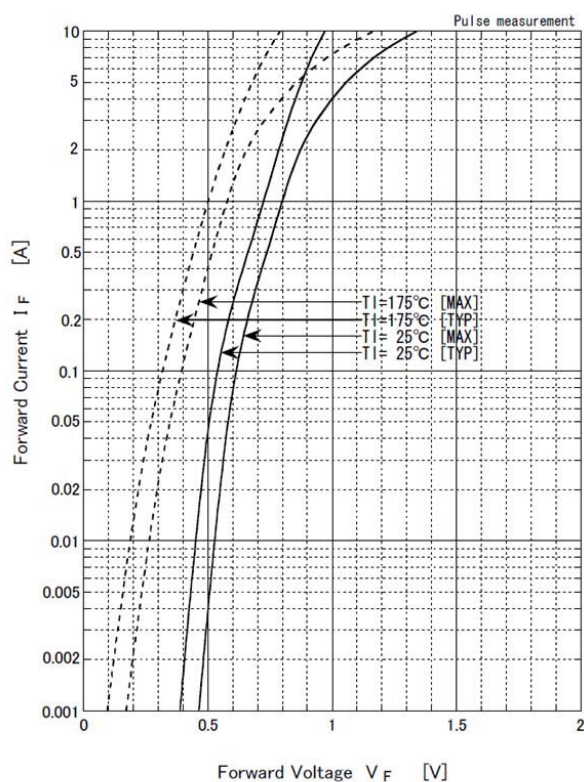
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=2A$, Pulse measurement			0.86	V
Forward voltage	V_F	$I_F=1A$, Pulse measurement			0.8	V
Reverse current	I_R	$V_R=100V$, Pulse measurement			0.005	mA
Total capacitance	C_t	$f=1MHz$, $V_R=10V$		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

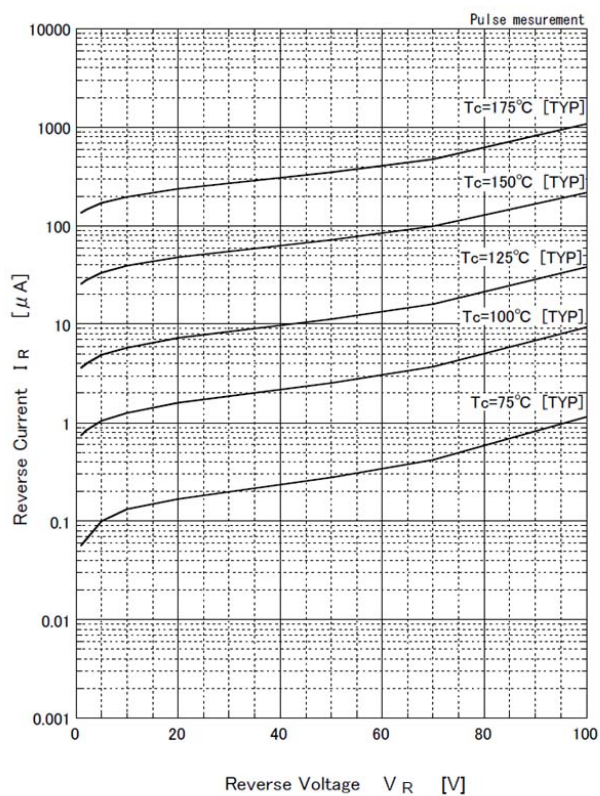
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

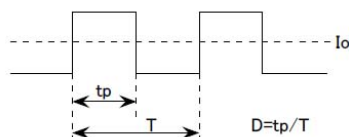
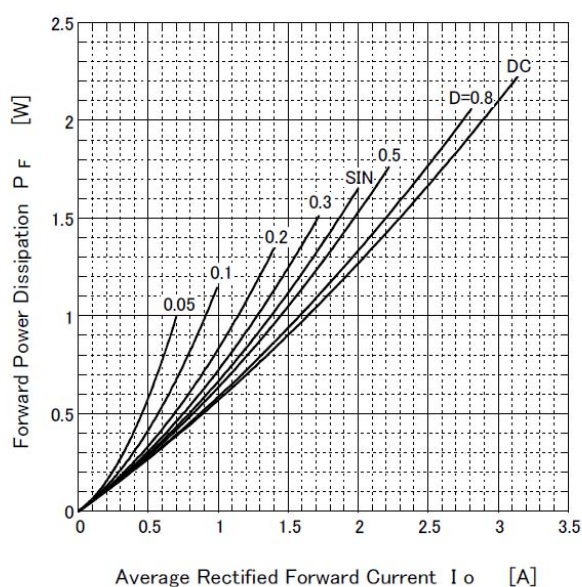
Forward Voltage



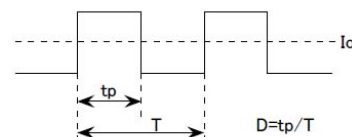
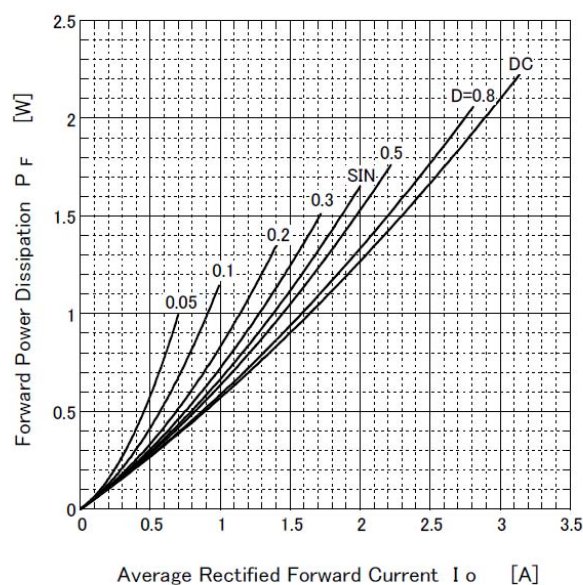
Reverse Current



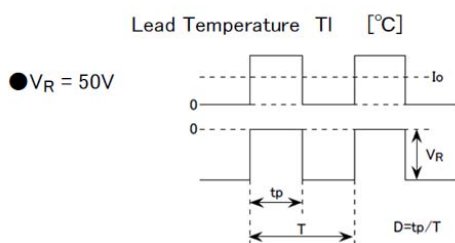
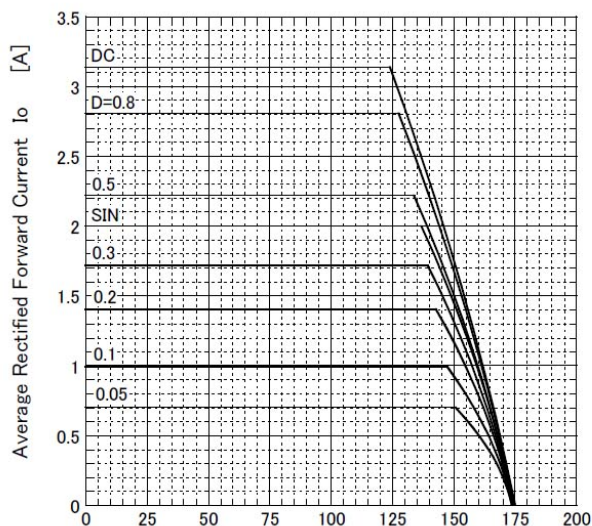
Forward Power Dissipation



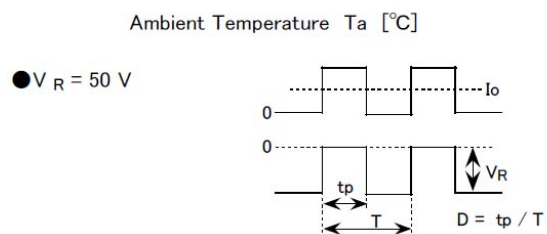
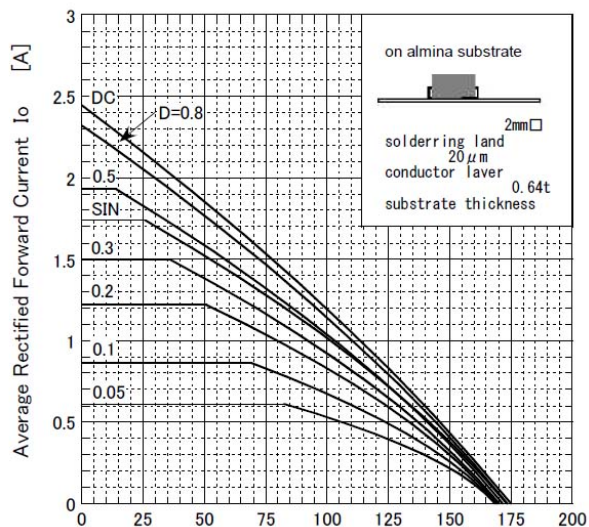
Forward Power Dissipation



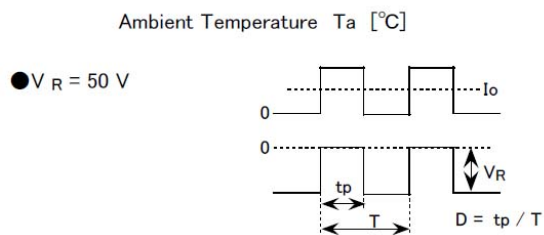
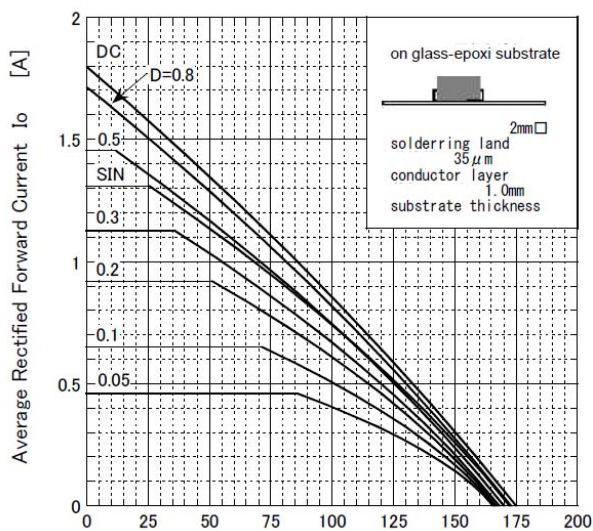
Derating Curve



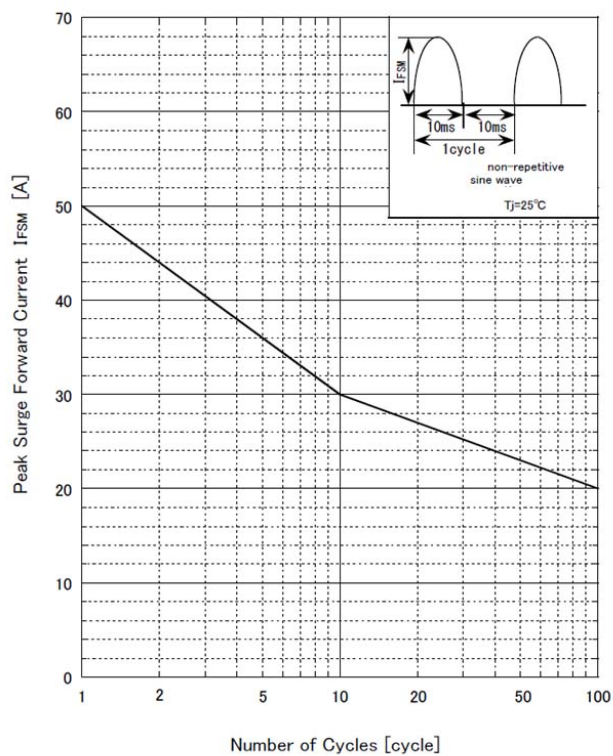
Derating Curve

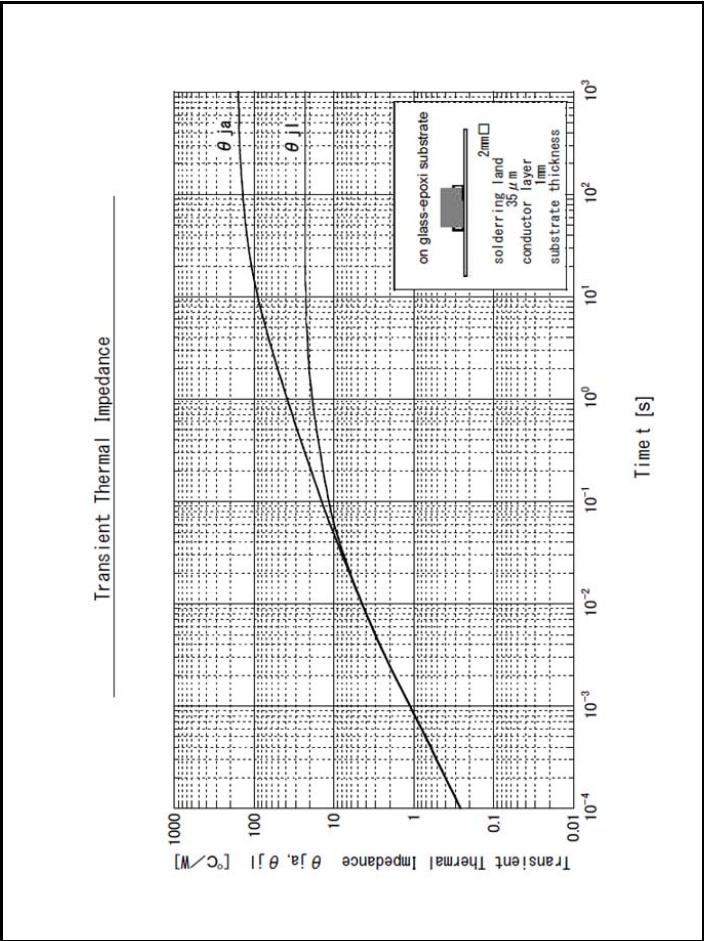
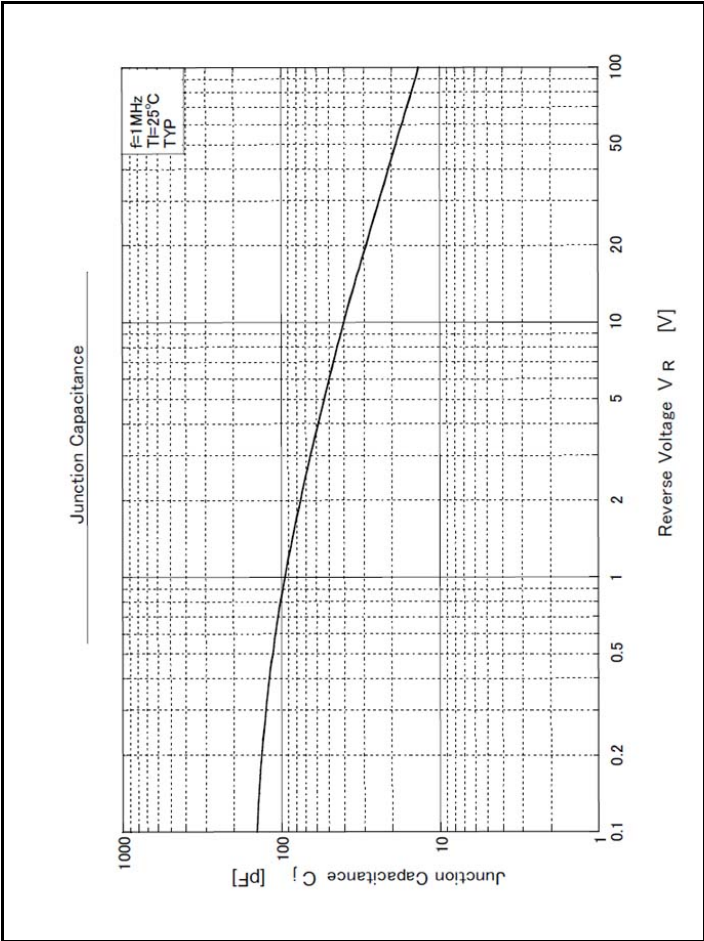
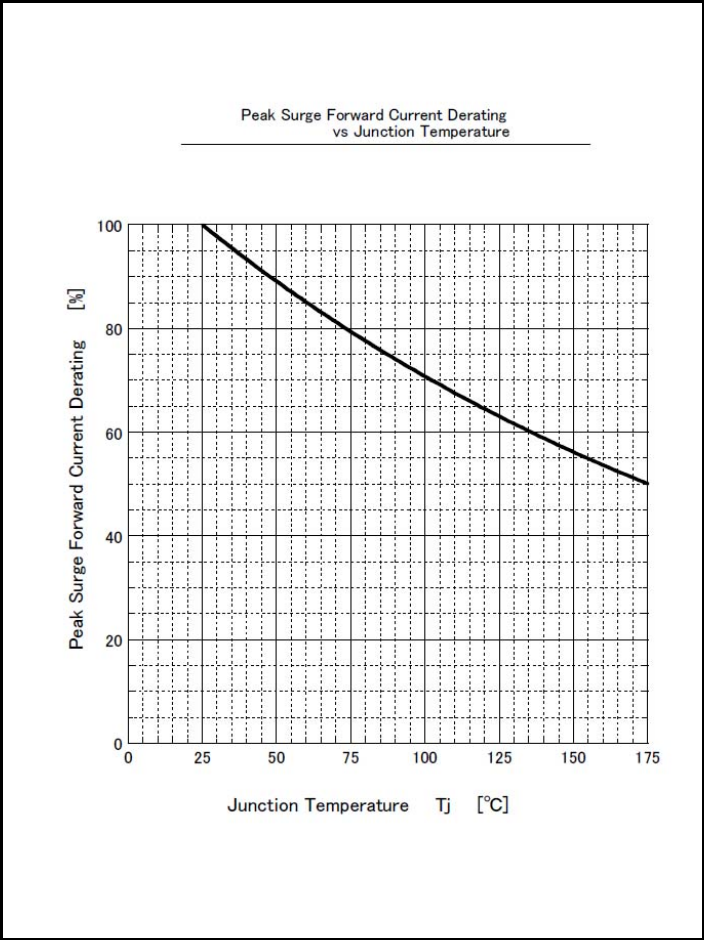
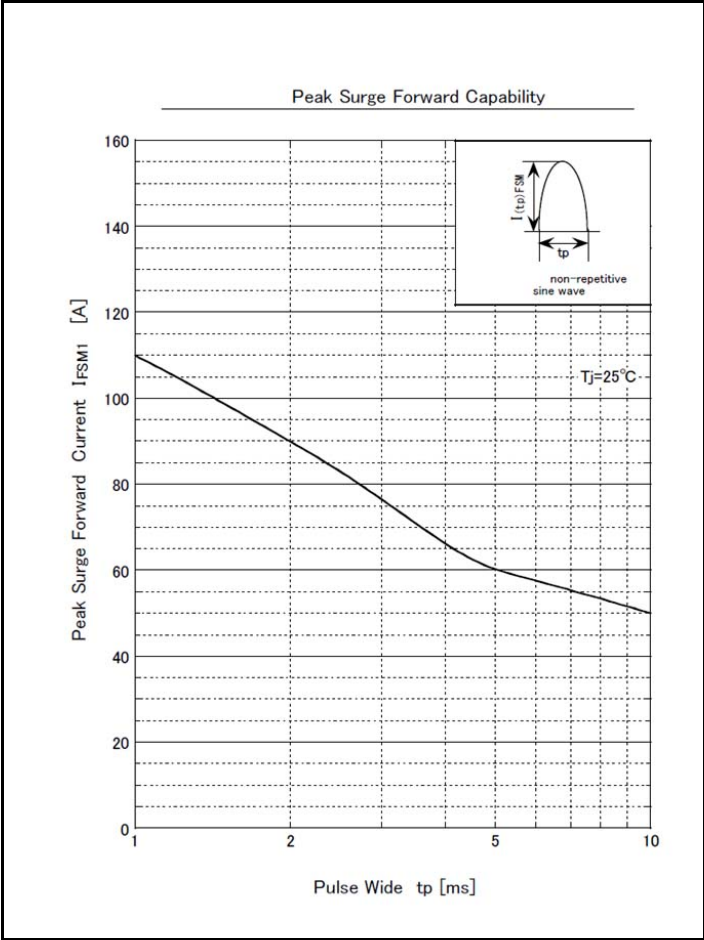


Derating Curve

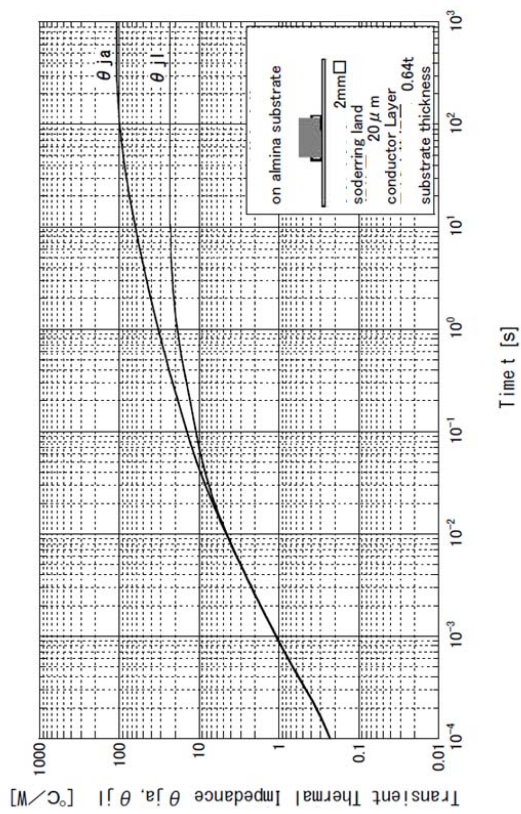


Peak Surge Forward Capability



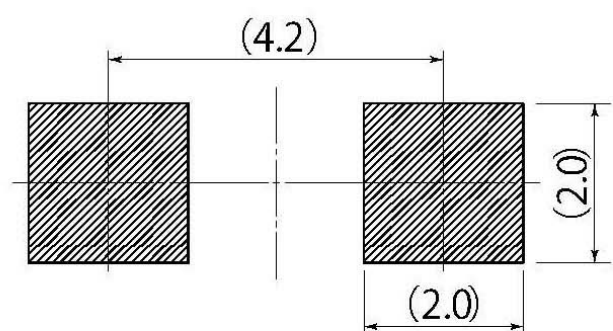
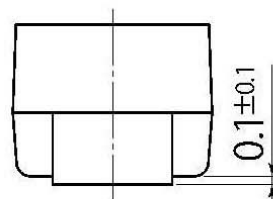
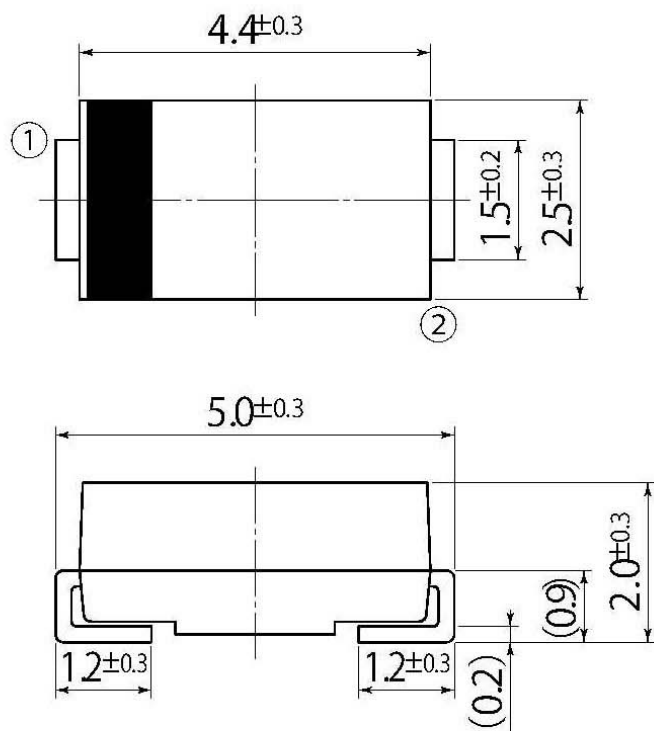


Transient Thermal Impedance



B3

JEDEC Code	DO-214AC
JEITA Code	—
House Name	1F, CF



Referential Soldering Pad

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

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