

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, 1cycle, Peak value, Tj=25°C	50	A

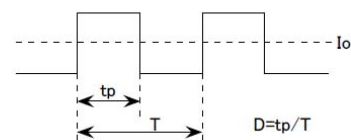
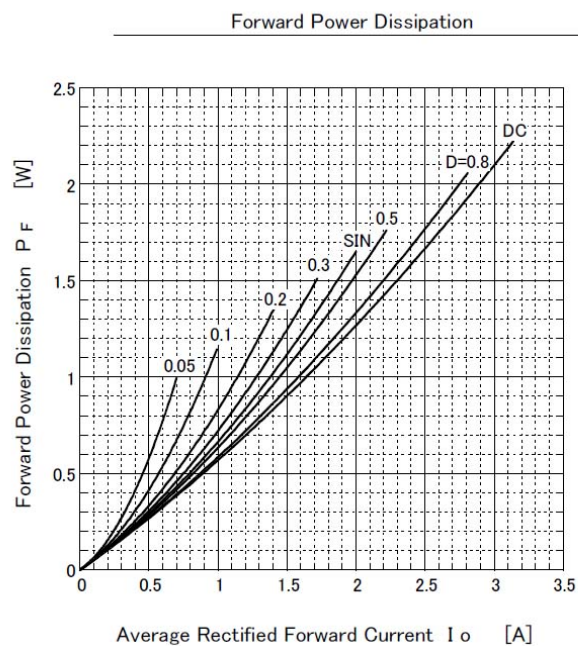
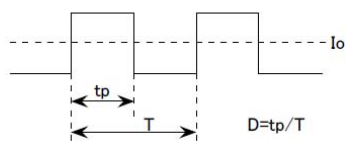
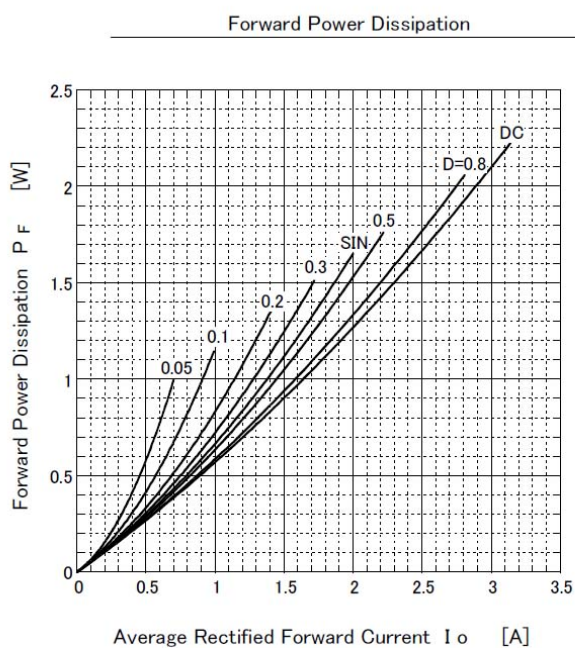
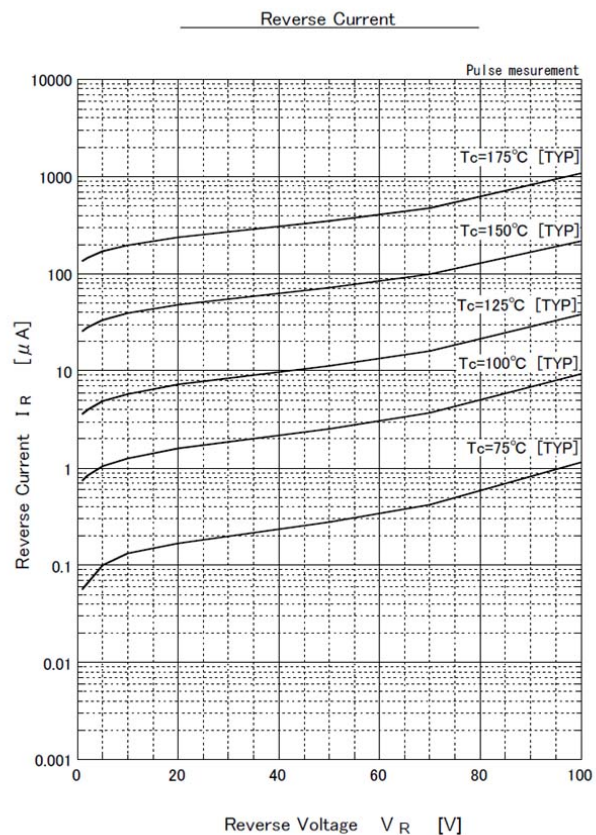
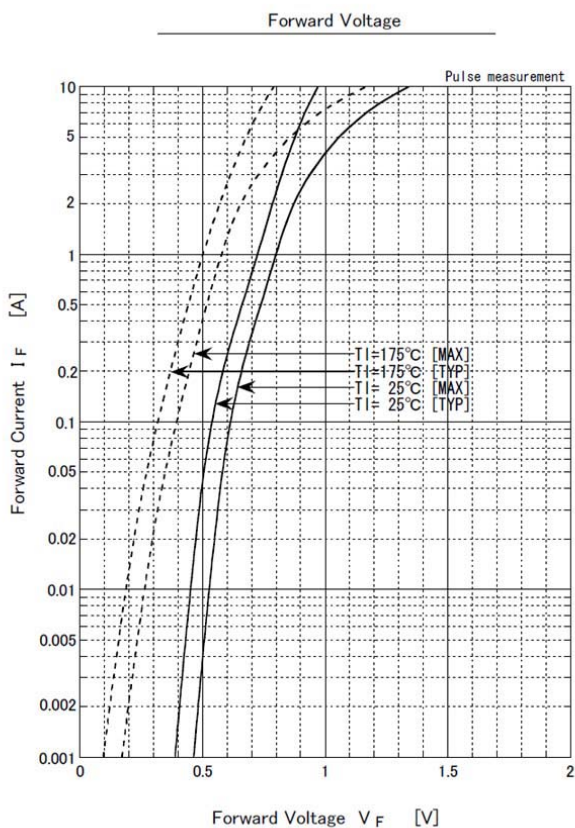
※ :See the original Specifications

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

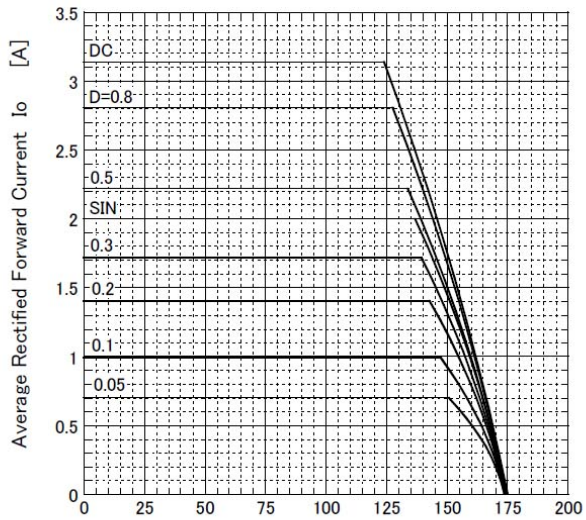
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=2A, Pulse measurement			0.86	V
Forward voltage	V_F	IF=1A, Pulse measurement			0.8	V
Reverse current	I_R	VR=100V, Pulse measurement			0.005	mA
Total capacitance	C_t	f=1MHz, VR=10V		40		pF
Thermal resistance	Rth(j-l)	Junction to lead			23	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On alumina substrate			108	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate			157	°C/W

※ :See the original Specifications

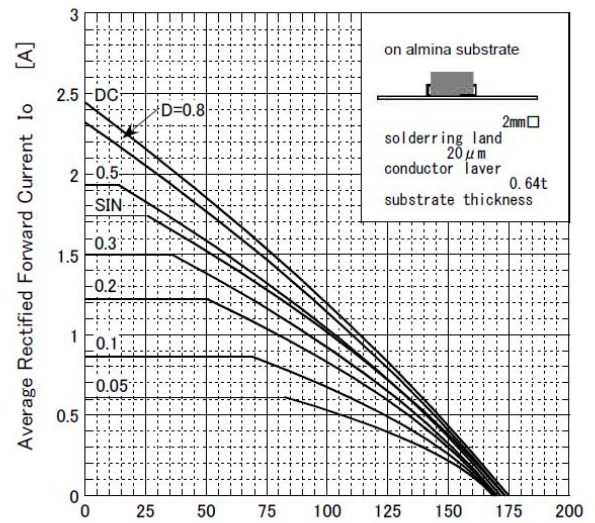
CHARACTERISTIC DIAGRAMS



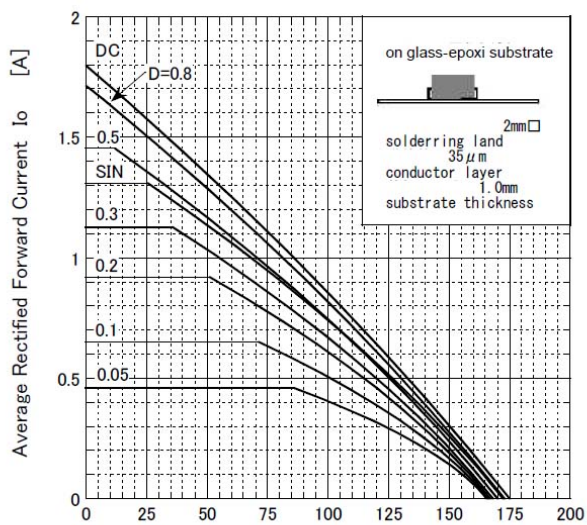
Derating Curve



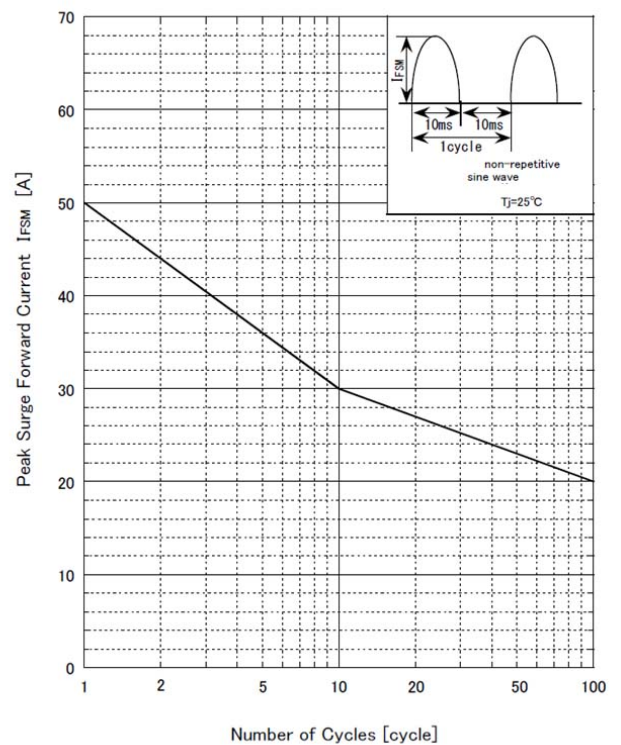
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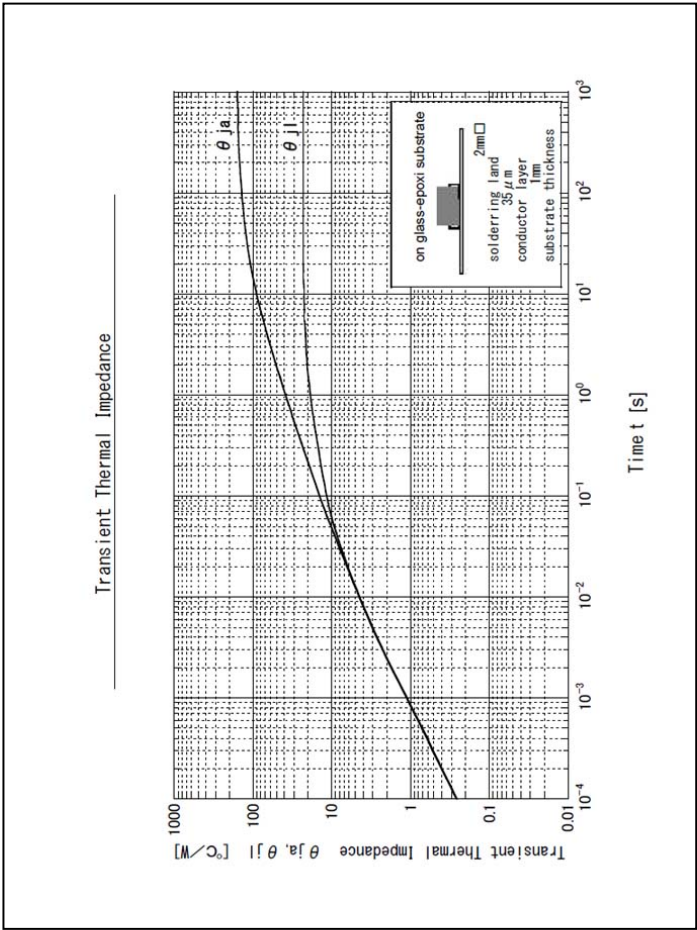
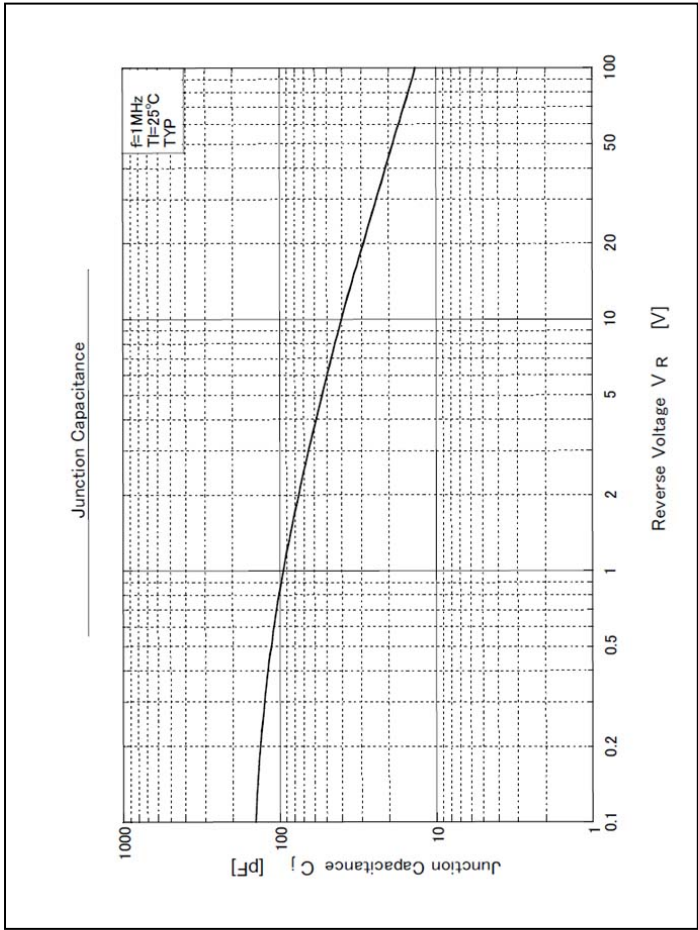
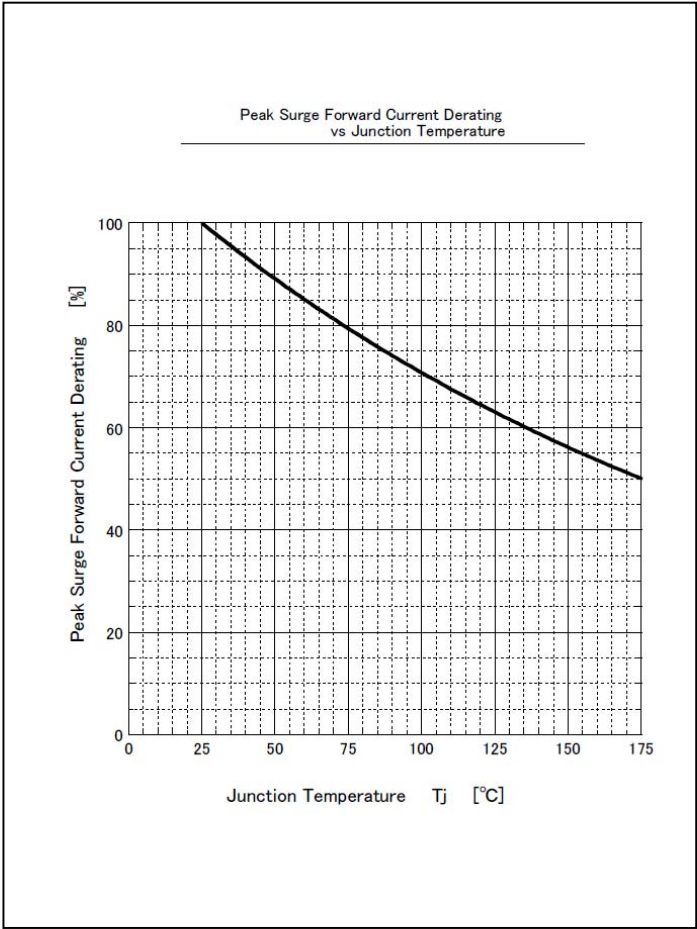
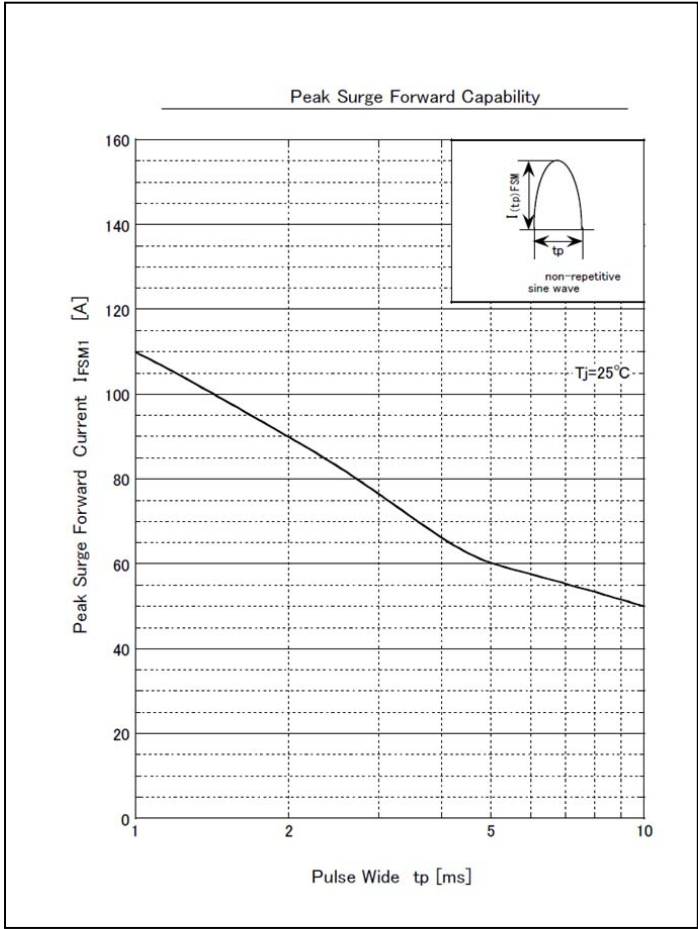


Derating Curve

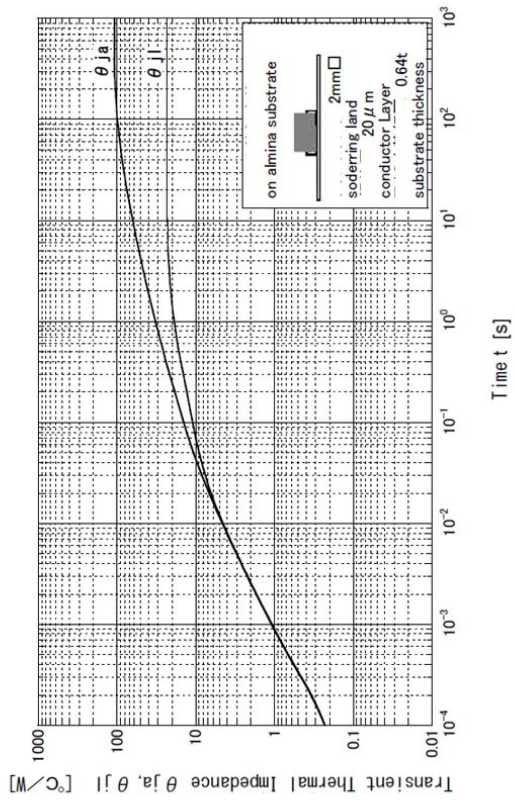


Peak Surge Forward Capability



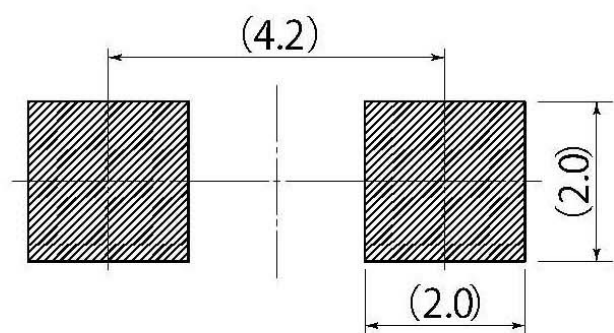
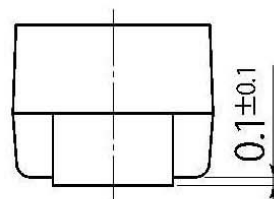
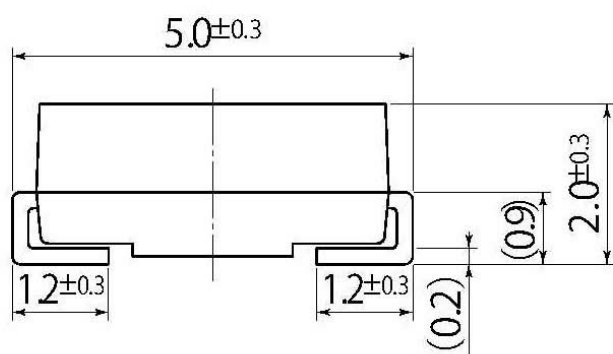
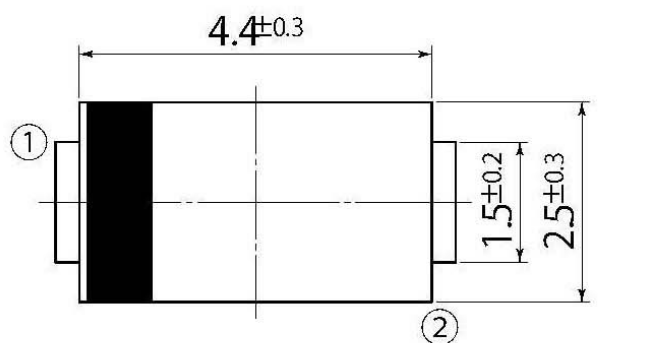


Transient Thermal Impedance



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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