

S2NBC100-7062

Bridge Diodes
1000V, 2A

Feature

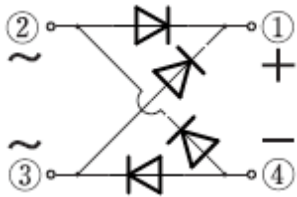
- Small SMD (There is also DIP)
- High Voltage
- High I_{FSM}
- Pin-distance 3.4mm for isolation
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): 1NA



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	V_{RRM}		1000	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, On glass-epoxy substrate Tl=93°C ※	2	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※	1	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※	0.87	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	60	A
Surge forward current	I_{FSM}	60Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	65	A
Surge forward current	I_{FSM1}	tp=1ms, sine wave, Non-repetitive, peak value, per diode, Tj=25°C	141	A

※ : See the original Specifications

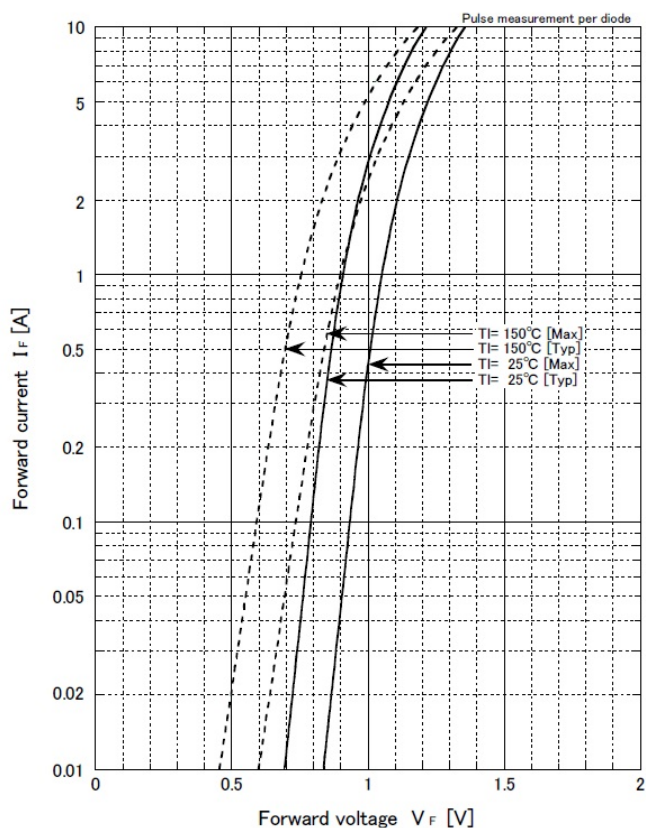
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=1A, Pulse measurement, per diode			1.05	V
Reverse current	I_R	VR=1000V, Pulse measurement, per diode			10	μA
Total capacitance	Ct	f=1MHz, VR=10V		12.3		pF
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate ※			15	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			68	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			84	°C/W

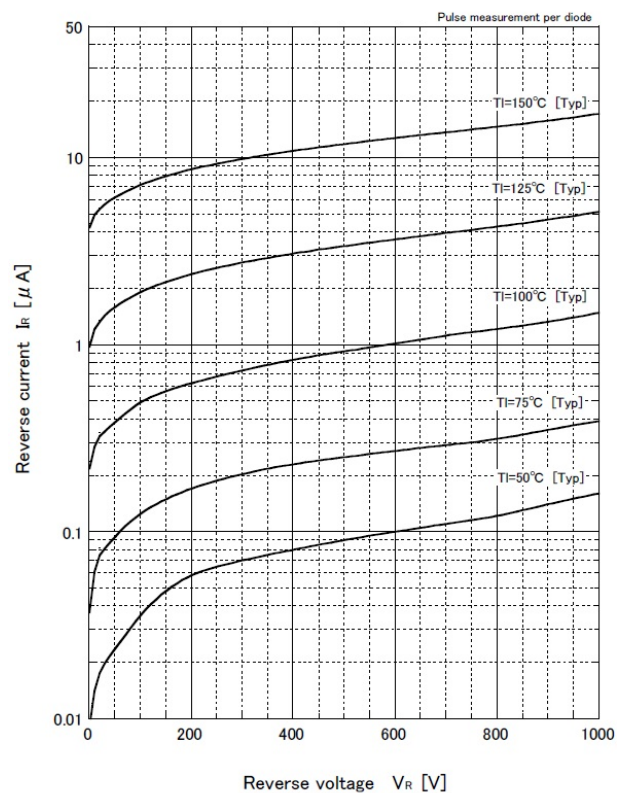
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

Forward voltage

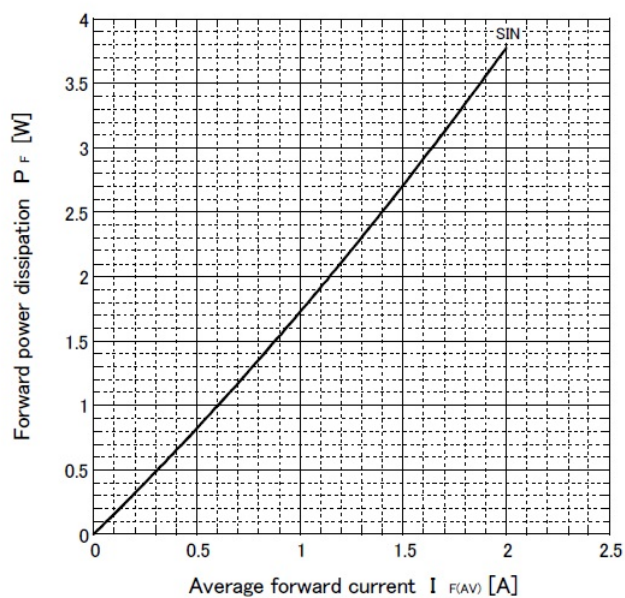


Reverse current

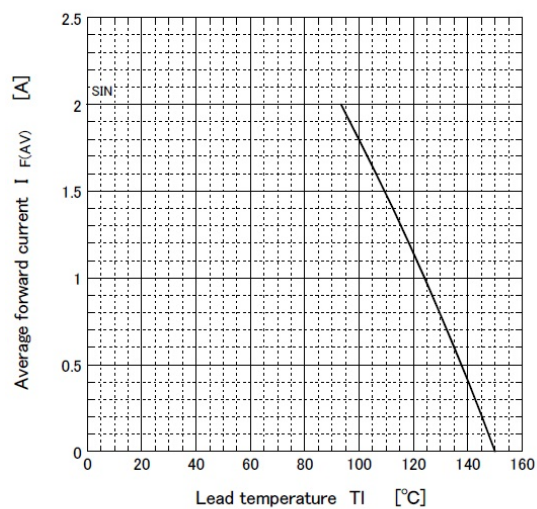


Note: The above characteristics curves are presented for reference only and not guaranteed by production test, unless otherwise noted.

Forward power dissipation



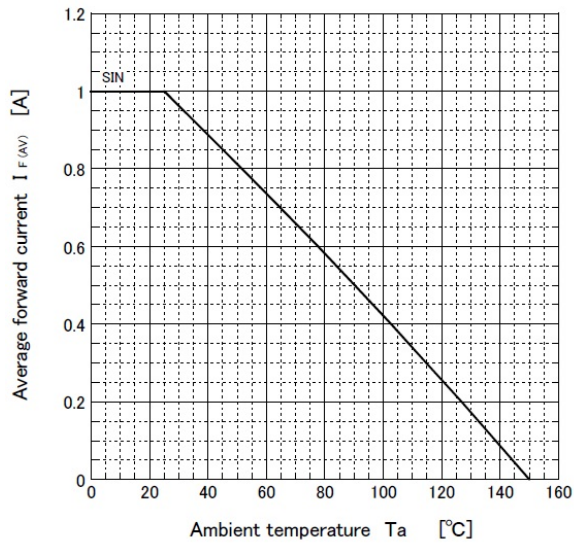
Derating curve



Substrate detail

Type	Glass-epoxy
Size	50mm × 50mm
Thickness	1mm
Conductor thickness	35 μm
Pattern area	174mm ²

Derating curve

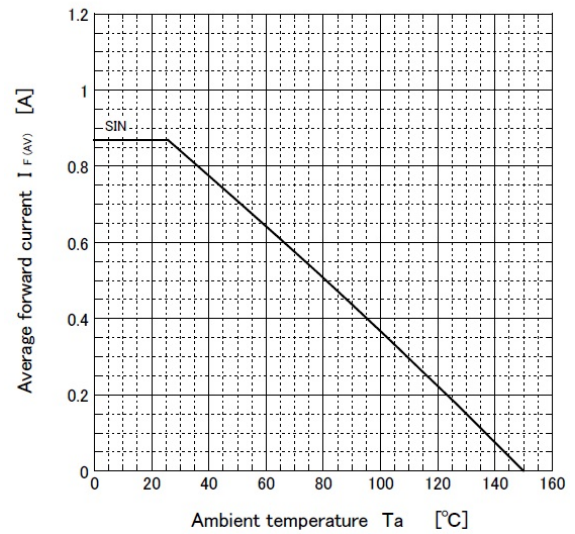


● $V_R = 1000V$
R-load
Free in air

● Substrate detail

Type	Glass-epoxy
Size	150mm × 90mm
Thickness	1mm
Conductor thickness	70 μm
Pattern area	324mm ²

Derating curve

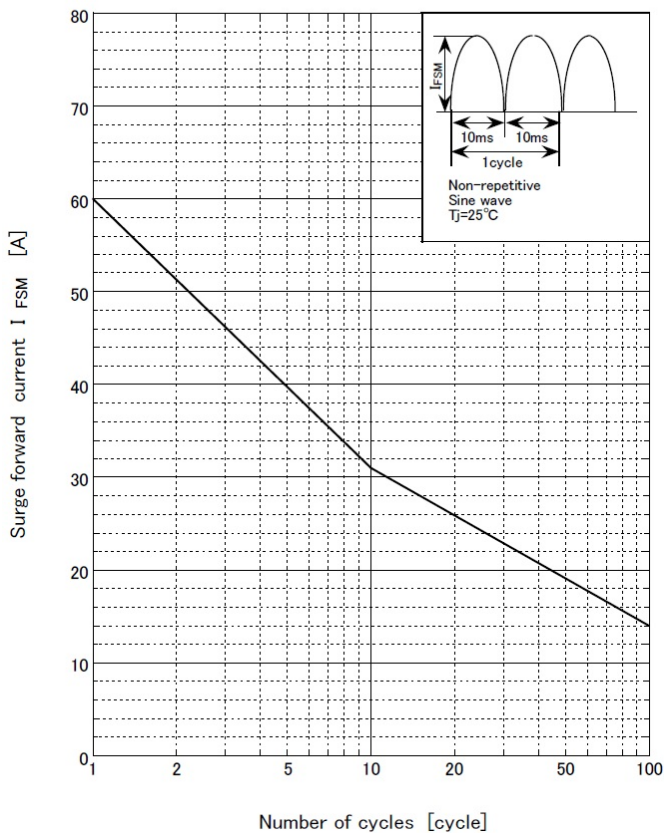


● $V_R = 1000V$
R-load
Free in air

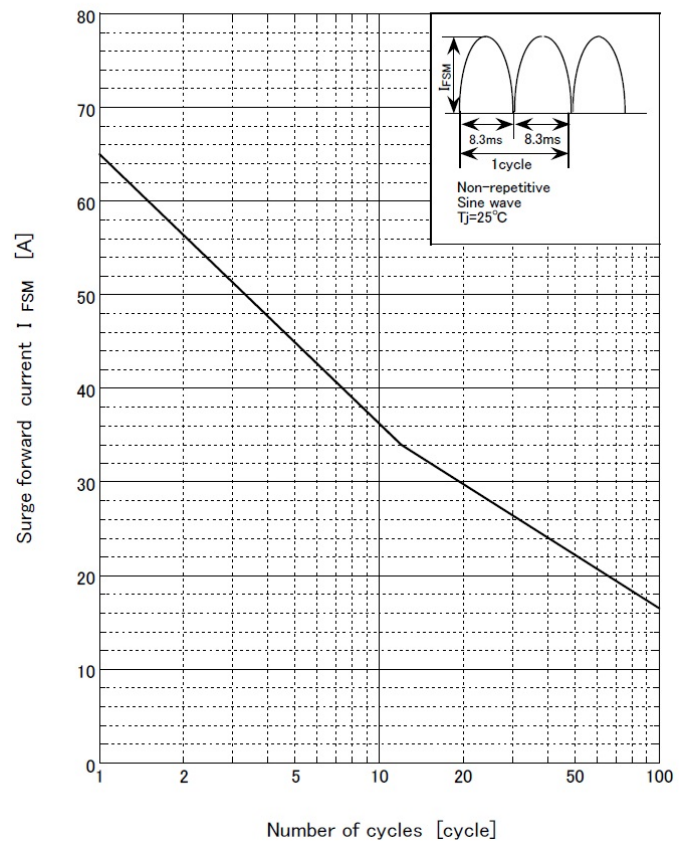
● Substrate detail

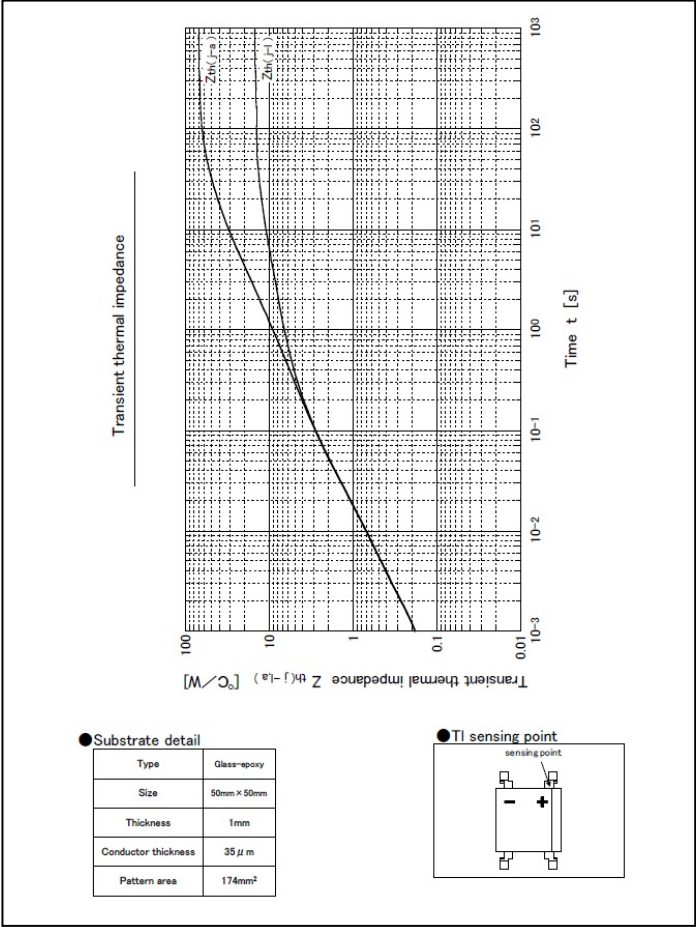
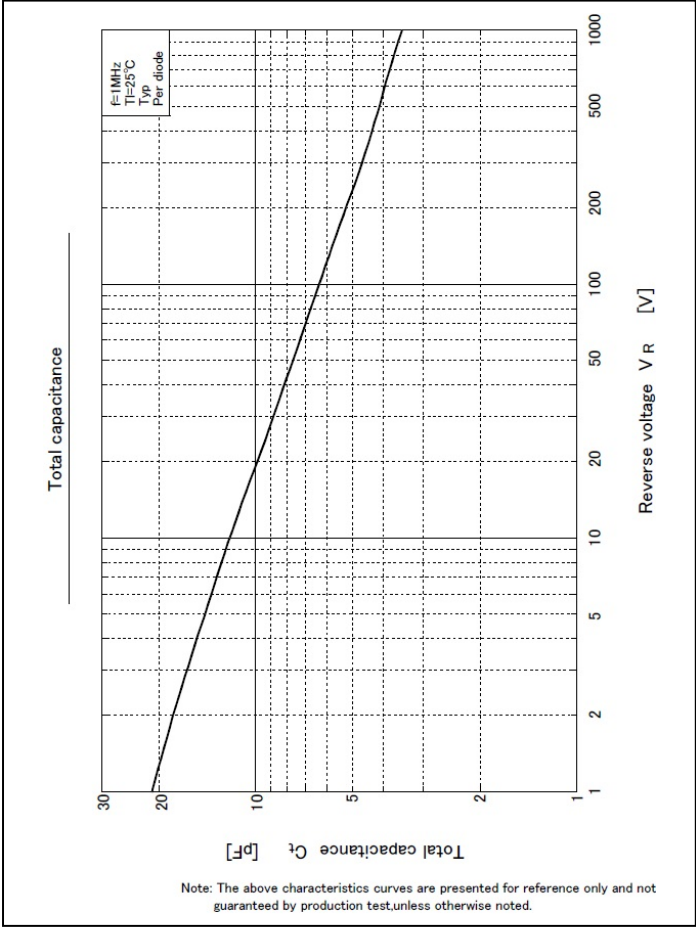
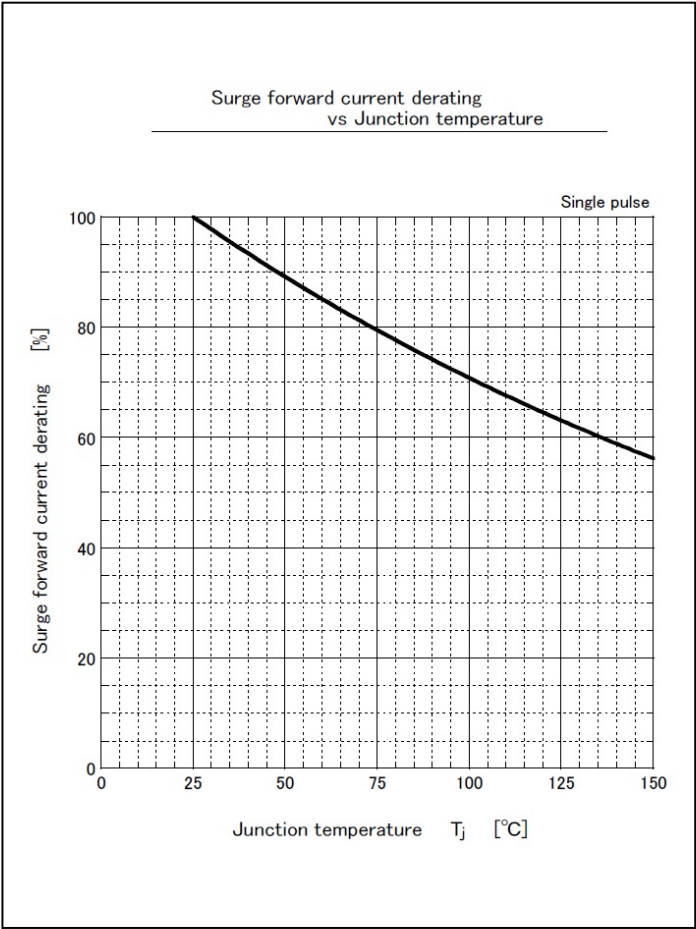
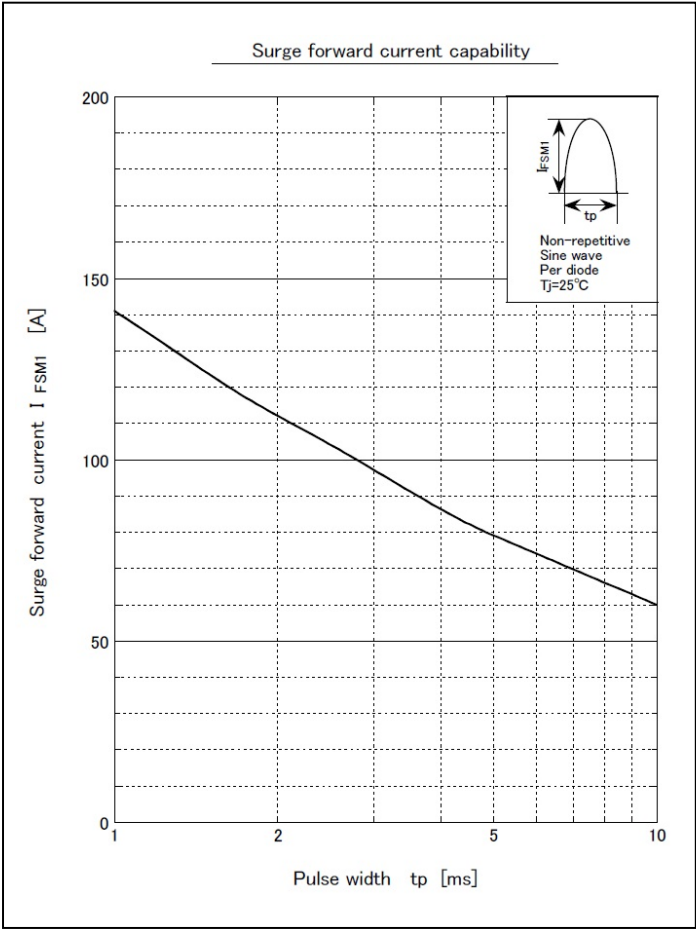
Type	Glass-epoxy
Size	50mm × 50mm
Thickness	1mm
Conductor thickness	35 μm
Pattern area	174mm ²

Surge forward current capability



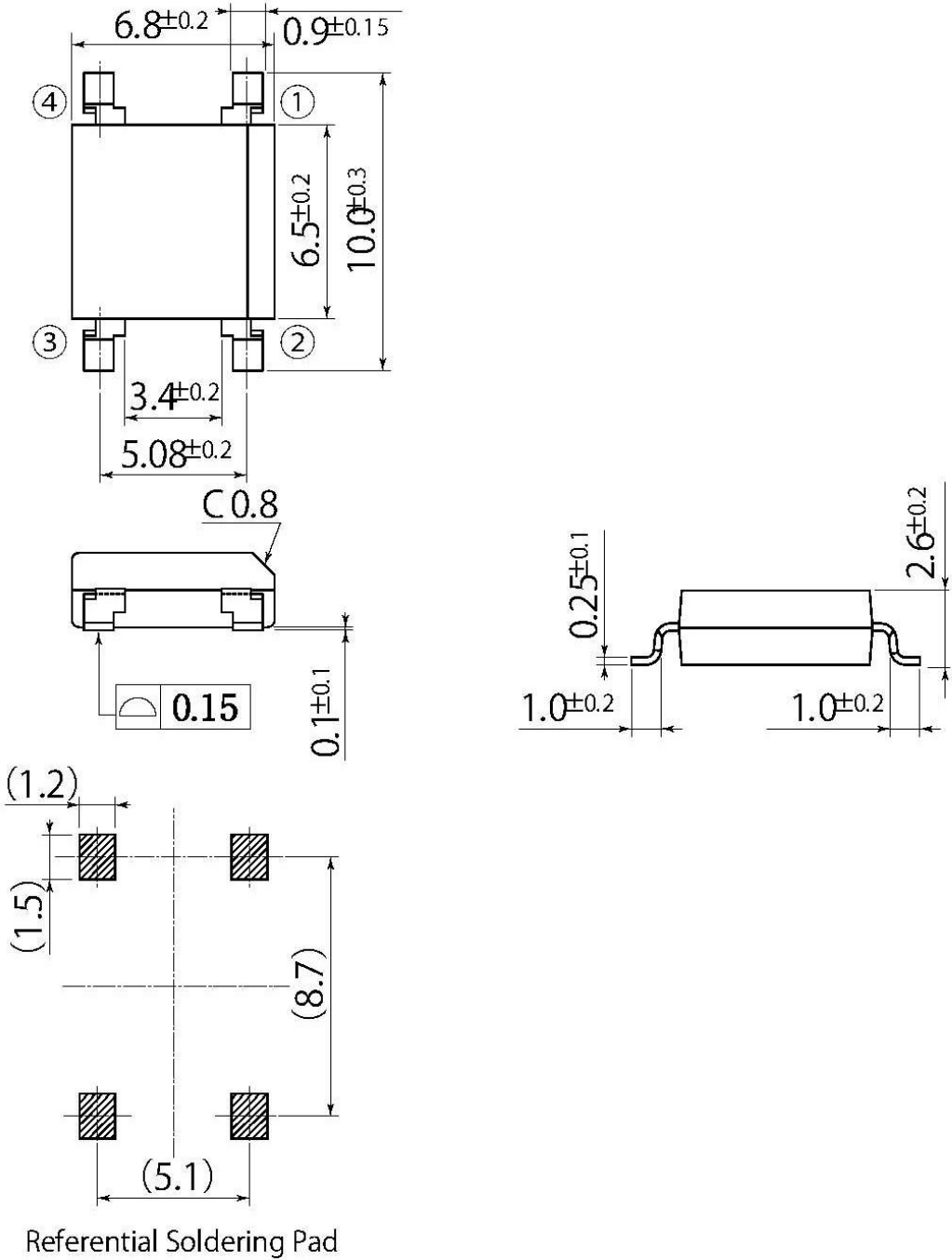
Surge forward current capability





C6

JEDEC Code	—
JEITA Code	—
House Name	1NA(SMD)



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

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