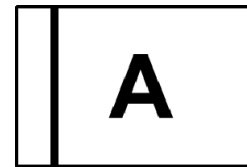


Feature

- Forward Current: 100mA
- Reverse voltage: 40V
- Low forward voltage
- Low leakage current
- Trench MOS barrier Schottky technology
- Ultra Small mold type. (DFN0603-2L)


DFN0603-2L(Bottom View)

Circuit Diagram

Marking (Top View)
Applications

- Low current rectification
- Voltage clamping
- Protection circuits
- Ultra high-speed switching

Mechanical Characteristics

- Mounting position: Any
- Qualified max reflow temperature:260°C
- Device meets MSL 1 requirements
- DFN0603-2L without plating

Electrical characteristics per line@25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F		0.30	0.35	V	$I_F=1.0mA$
Forward voltage	V_F		0.35	0.42	V	$I_F=10mA$
Forward voltage	V_F		0.47	0.55	V	$I_F=100mA$
Reverse current	I_R			0.3	μA	$V_R=10V$
Reverse current	I_R			0.5	μA	$V_R=30V$
Reverse current	I_R			10	μA	$V_R=40V$
Junction Capacitance	C_j		15		pF	$V_R=0V, f=1MHz$

Absolute maximum rating@25°C

Parameter	Symbol	limits	Unit
Reverse voltage (DC)	V_{RM}	40	V
Average rectified forward current	I_o	100	mA
Forward current surge peak (60Hz 1cyc)	I_{FSM}	2.0	A
Operating Junction temperature Range	T_j	-55 to 125	°C
Storage temperature Range	T_{stg}	-55 to 125	°C

Typical Characteristics

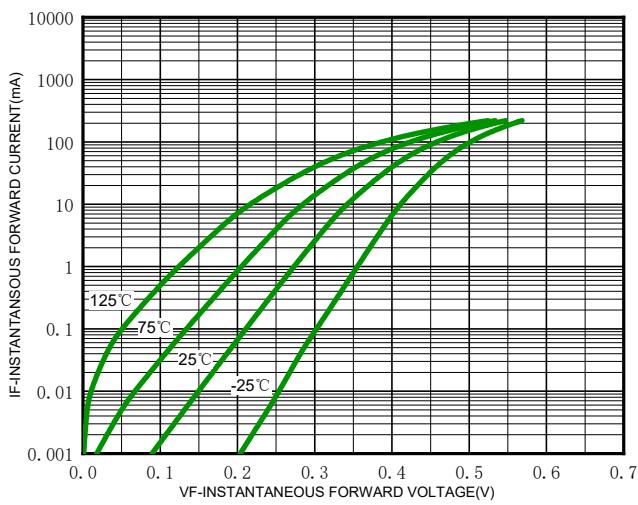


Fig.1 Typical Forward Characteristics

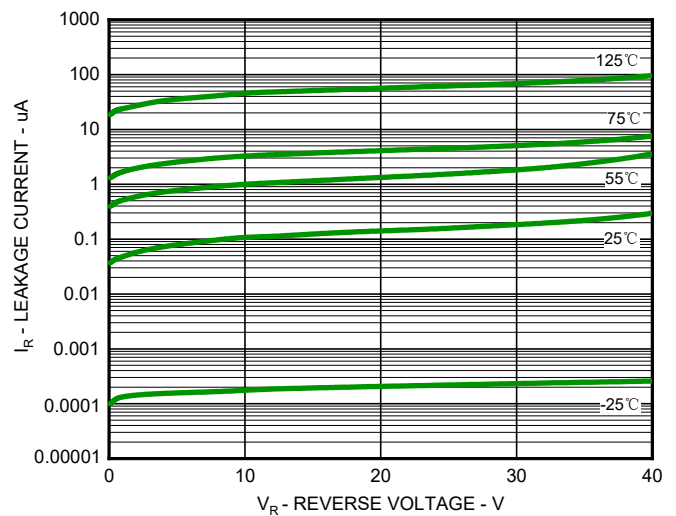


Fig 2. Leakage Current

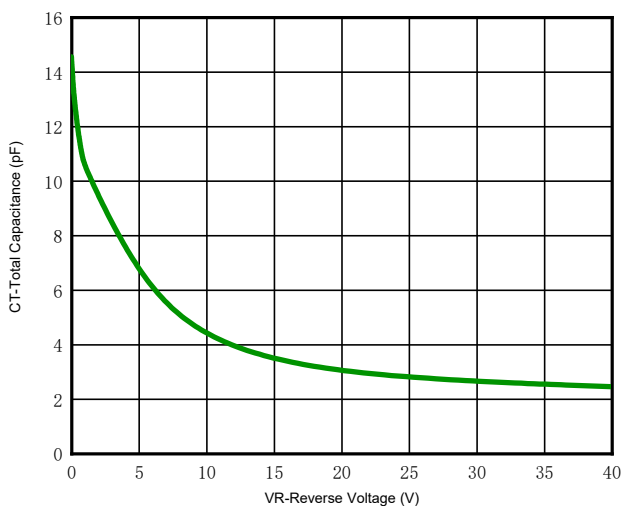
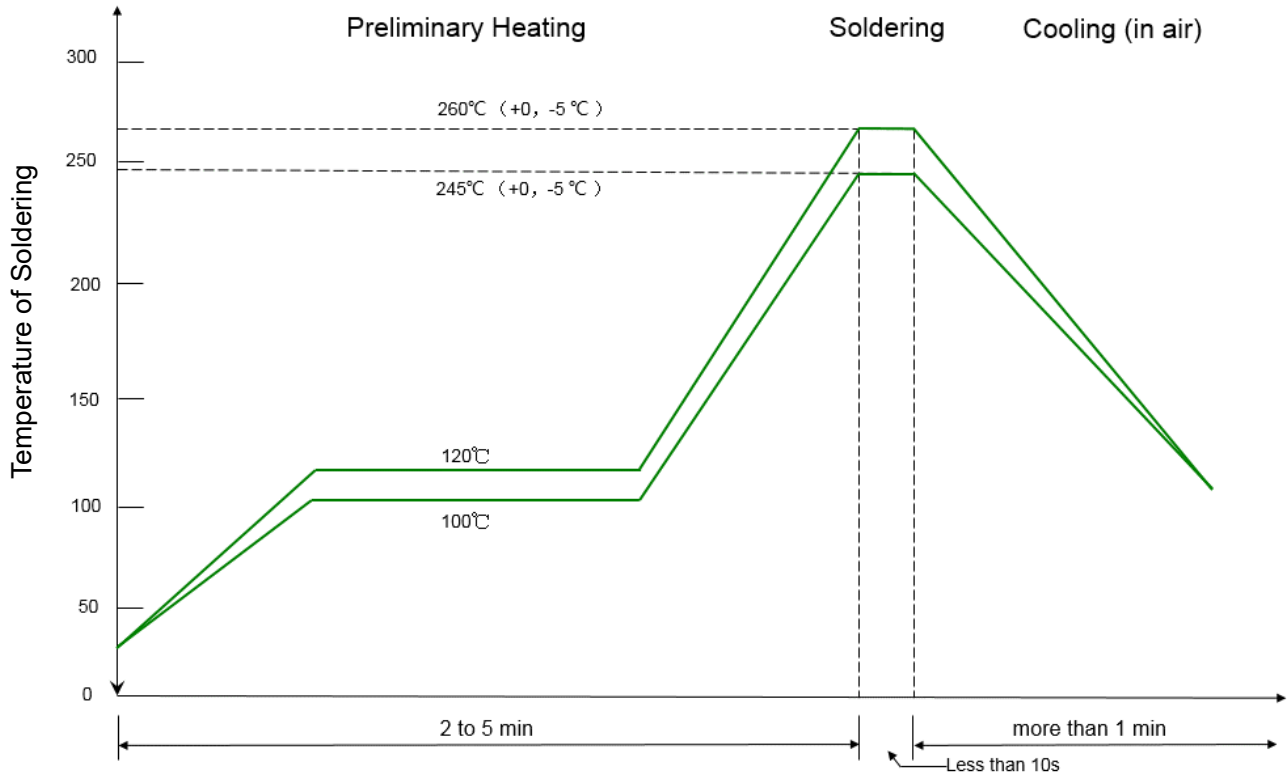


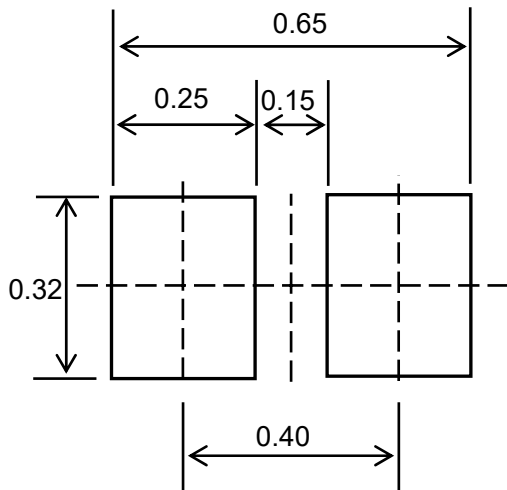
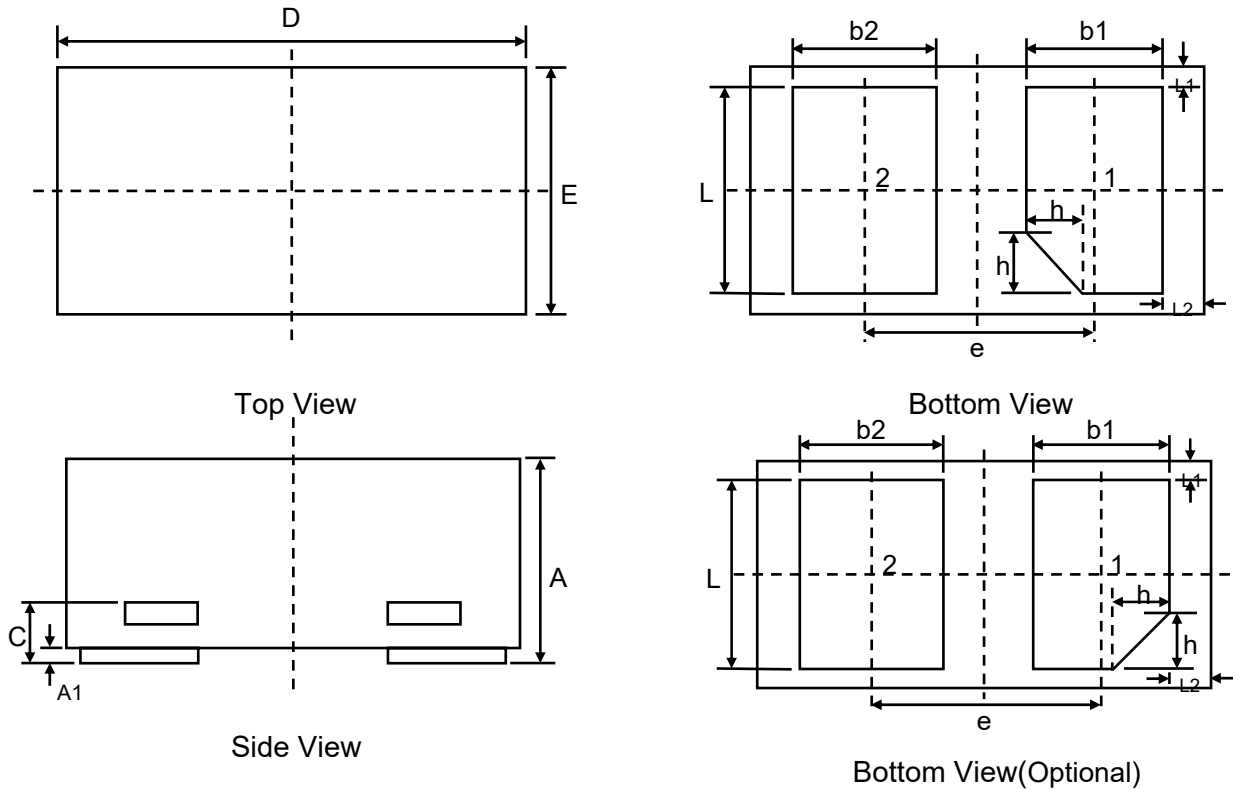
Fig 3.Total Capacitance

Solder Reflow Recommendation



Remark: Pb free for 260°C; Pb for 245°C

Product dimension (DFN0603-2L)



Suggested PCB Layout

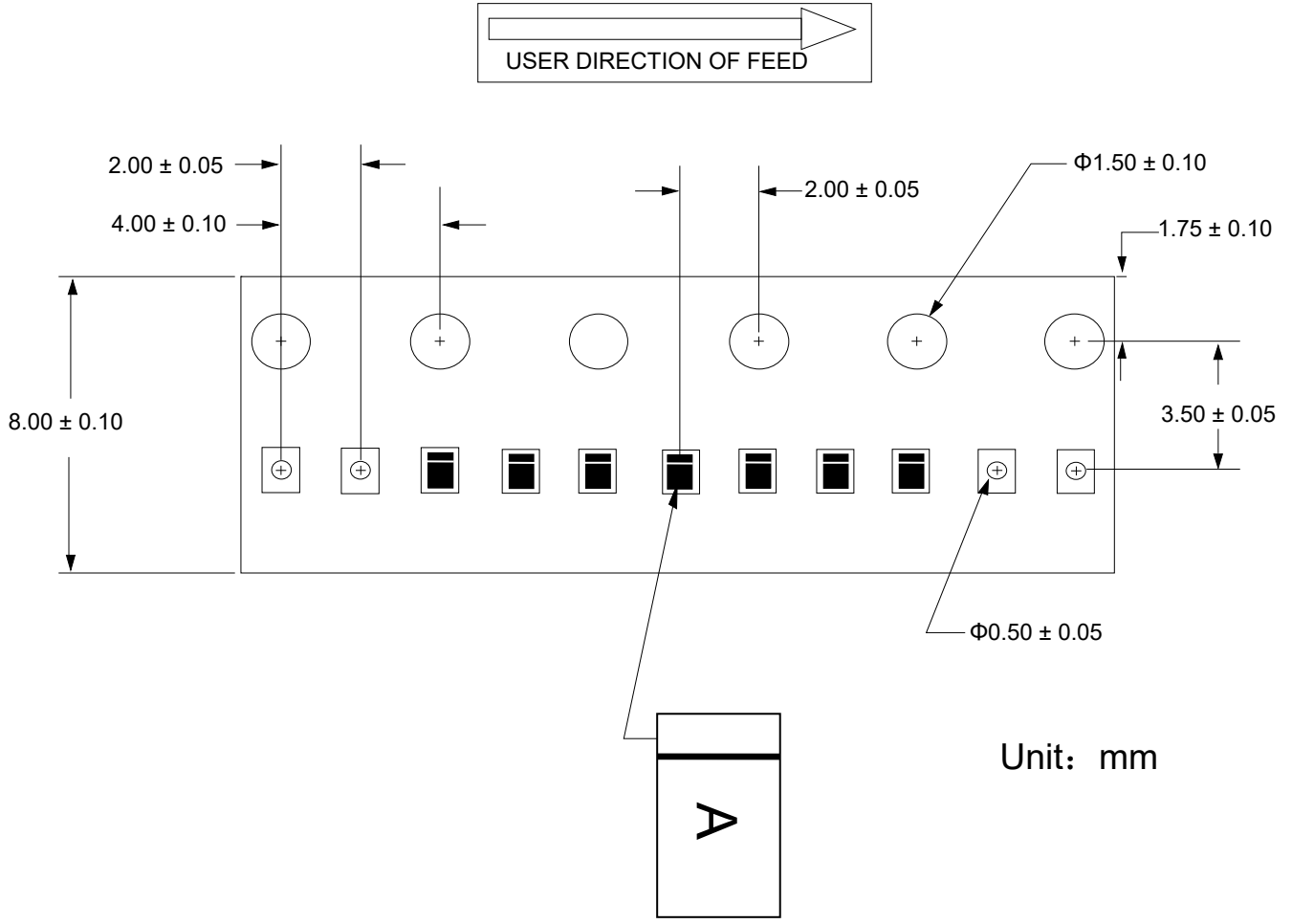
Unit:mm

Dim	Millimeters		
	MIN	Typ.	MAX
A	0.28	0.30	0.35
A1	0	0.02	0.05
b1	0.13	0.18	0.23
b2	0.14	0.19	0.24
c	0.05	0.10	0.15
D	0.55	0.60	0.65
e	0.35BSC		
L1	0.025BSC		
L2	0.035BSC		
E	0.25	0.30	0.35
L	0.20	0.25	0.30
h	0	0.05	0.10


Ordering information

Device	Package	Reel	Shipping
PSBD2XD40V01	DFN0603-2L (Pb-Free)	7"	12000 / Tape & Reel

Load with information




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