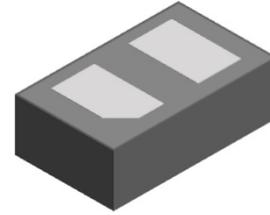
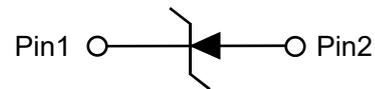


**Feature**

- Forward Current: 200mA
- Reverse voltage: 40V
- Low forward voltage
- Low leakage current
- Trench MOS barrier Schottky technology
- Ultra Small mold type. (DFN1006-2L)


**DFN1006-2L(Bottom View)**
**Applications**

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


**Circuit Diagram**
**Mechanical Characteristics**

- Mounting position: Any
- Qualified max reflow temperature: 260°C
- Device meets MSL 1 requirements
- DFN1006-2L without plating

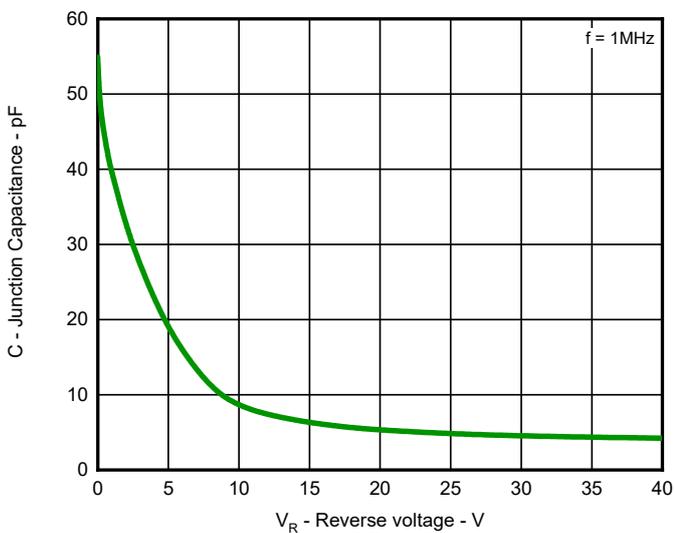
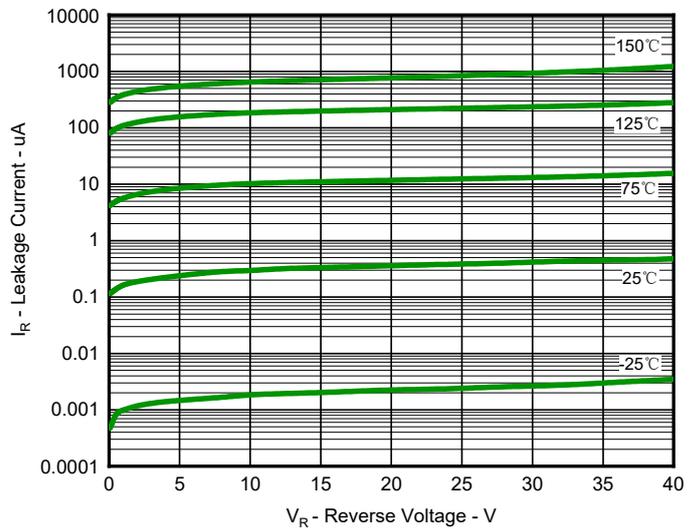
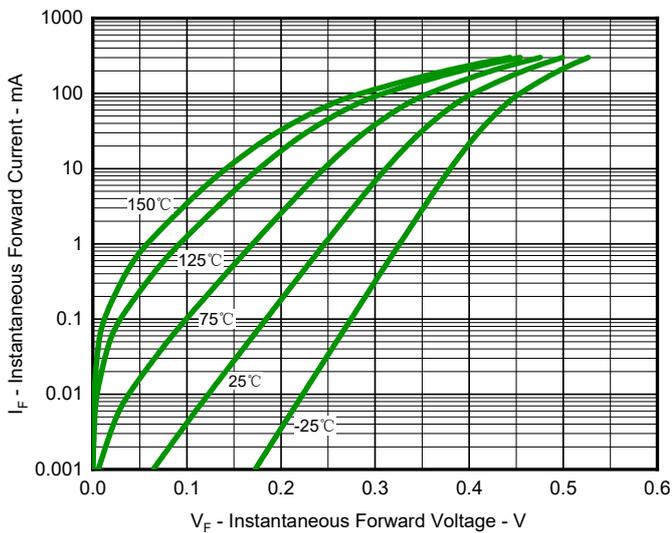

**Marking (Top View)**
**Electrical characteristics per line@25°C (unless otherwise specified)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Forward voltage	$V_F$	$I_F = 10\text{mA}$	-	0.31	0.35	V
		$I_F = 100\text{mA}$	-	0.40	0.45	
		$I_F = 200\text{mA}$	-	0.45	0.55	
Reverse current	$I_R$	$V_R = 10\text{V}$	-	-	3.0	$\mu\text{A}$
		$V_R = 40\text{V}$	-	-	10	
Junction Capacitance	$C_J$	$V_R = 0\text{V}, f = 1\text{MHz}$	-	55	-	pF

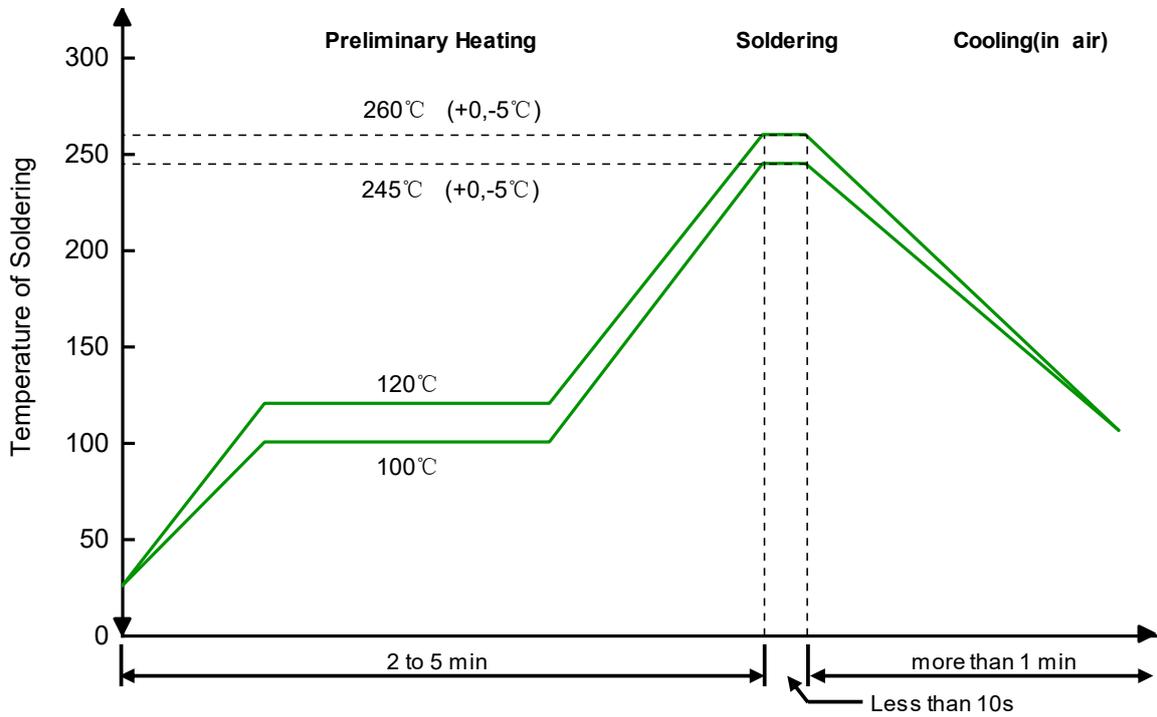
## Absolute maximum rating@25°C

Rating	Symbol	Value	Units
Reverse voltage (DC)	$V_{RM}$	40	V
Average rectified forward current	$I_o$	200	mA
Non-Repetitive Peak Forward Surge Current(8.3ms single half sine-wave superimposed on rated load)	$I_{FSM}$	3.5	A
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55~+150	°C

## Typical Characteristics



Solder Reflow Recommendation

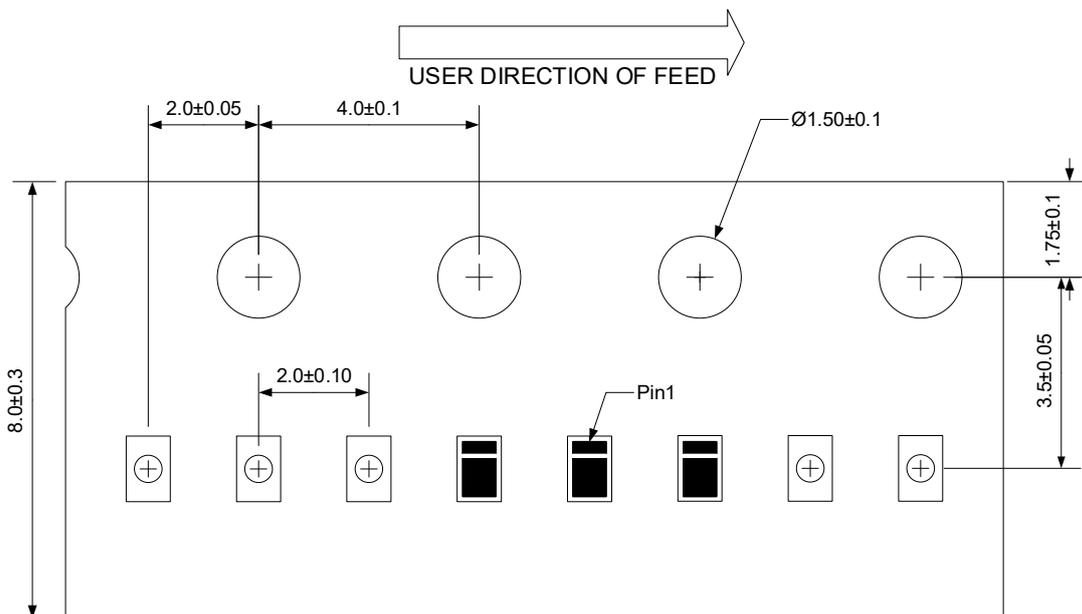


Remark: Pb free for 260°C; Pb for 245°C.

Ordering information

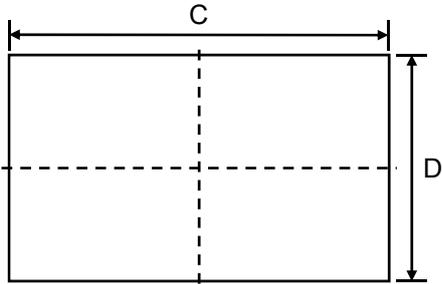
Device	Package	Reel	Shipping
PSBD2FD40V02H	DFN1006-2L (Pb-Free)	7"	10000 / Tape & Reel

Load with information

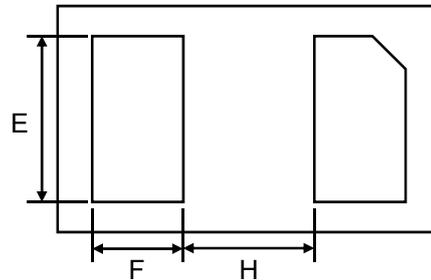


Unit:mm

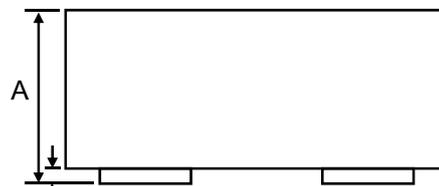
Product Dimension (DFN1006-2L)



Top View

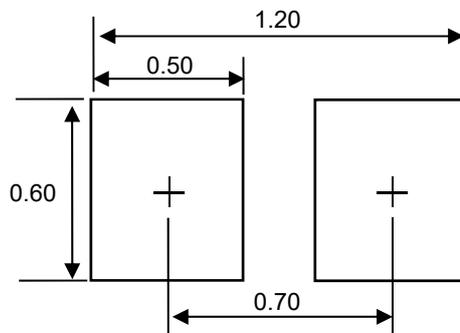


Bottom View



Side View

Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	0.340	0.498	0.013	0.020
B	0.000	0.050	0.000	0.002
C	0.950	1.080	0.037	0.043
D	0.550	0.680	0.022	0.027
E	0.400	0.600	0.016	0.024
F	0.200	0.300	0.008	0.012
H	0.400 Typ.		0.015 Typ.	



Unit: mm

Suggested PCB Layout

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