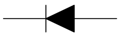
WSB5539N

0.5A, Schottky Barrier Diode

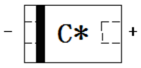
Http://www.sh-willsemi.com

Features

DFN1006-2L



Circuit



Marking

- Low forward voltage
- 0.5A Average rectified forward current
- Peak forward current tested
- Standard products are Pb-free and Halogen-free

Absolute maximum ratings

Parameter	Symbol	Value	Unit
Reverse voltage (repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	I_O	0.5	A
Peak forward current (1)	I_{FSM}	3	A
Repetitive peak forward current(2)	I_{FRM}	2	A
Junction temperature	T_J	150	°C
Operating temperature	Topr	-40 ~ 85	°C
Storage temperature	Tstg	-55 ~ 150	°C

Electronics characteristics (T_A=25°C)

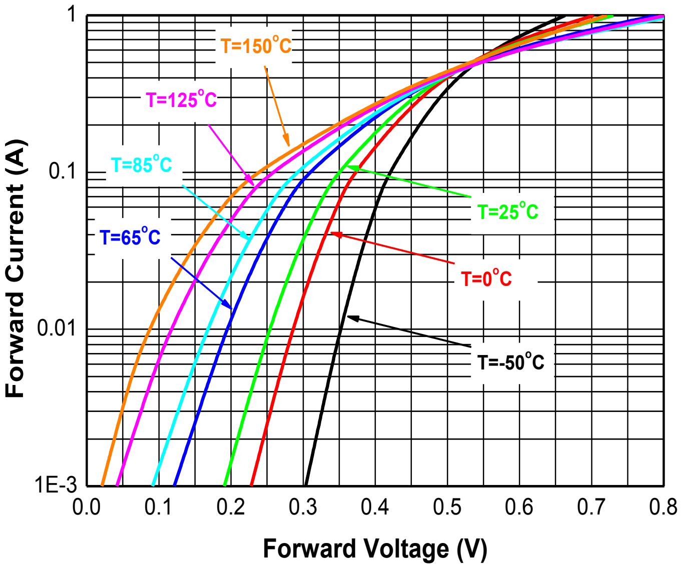
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	I_F=0.5A	-	0.53	0.63	V
Reverse current	I_R	V_R=40V	-	3	100	uA
Junction capacitance	C_J	V_R=4V, F=1MHz	-	20		pF
Thermal resistance	$R_{\theta(j\text{-}a)}$	Junction to ambient			500	K/W

Order Informations

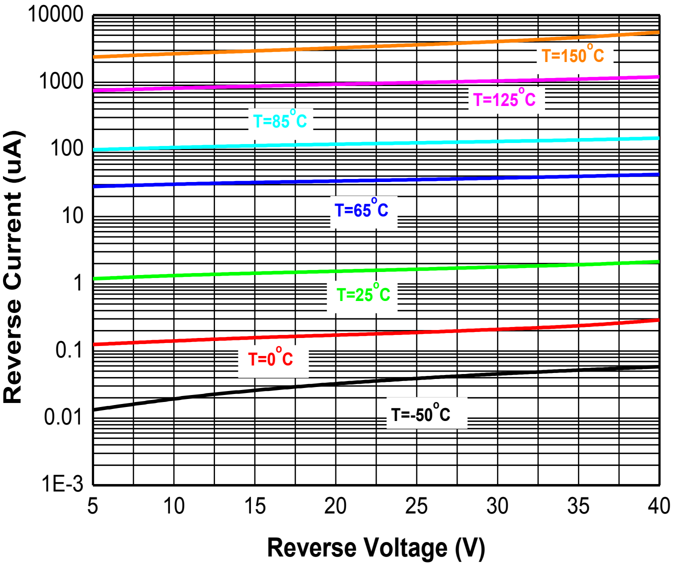
Device	Package	Marking	Shipping
WSB5539N-2/TR	DFN1006-2L	C* (3)	10000/Reel&Tape

Note 1 : Pulse Width=8.3ms, Single Pulse;
Note 2 : Pulse Width=1ms,Duty cycle=0.25;
Note 3 : * = Month code (A~Z); C = Device code;

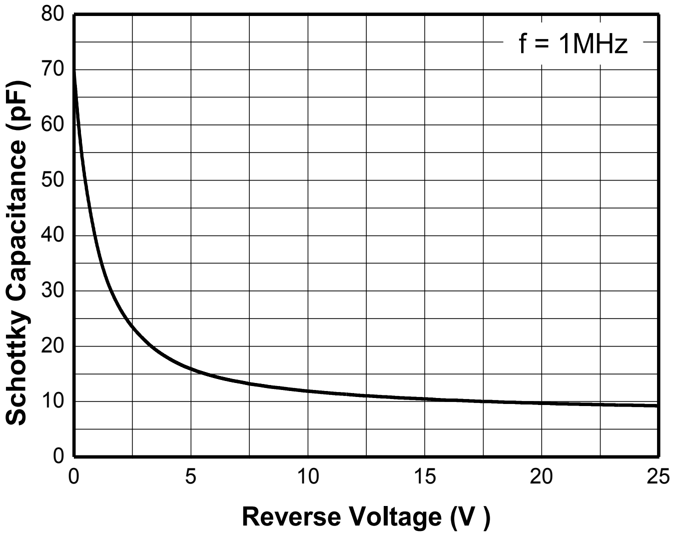
Typical characteristics (Ta=25°C, unless otherwise noted)



Forward voltage vs. Forward current



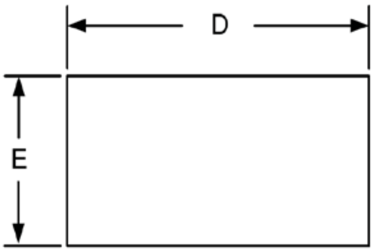
Reverse current vs. Reverse voltage



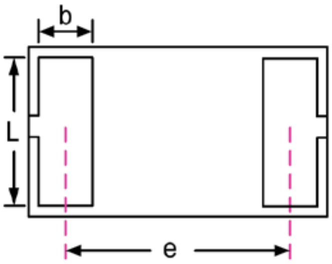
Junction capacitance vs. Reverse voltage

Package outline dimensions

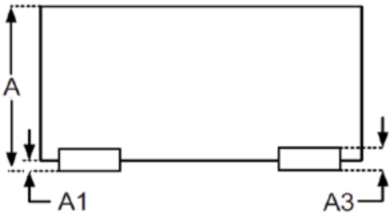
DFN1006-2L



Top View



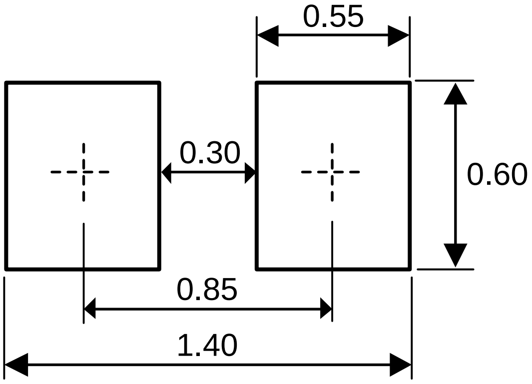
Bottom View



Side View

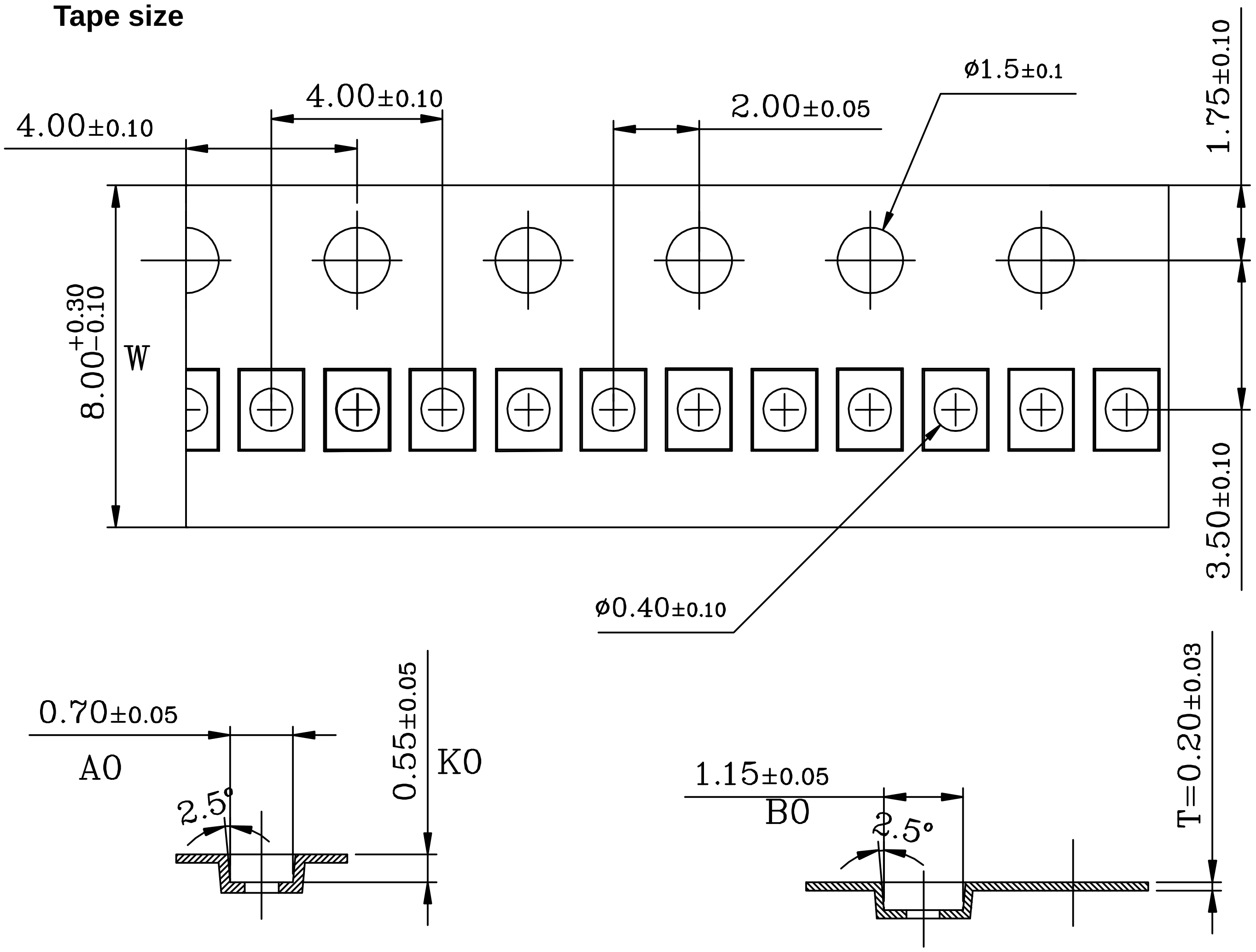
Symbol	Dimensions in millimeter		
	Min.	Typ.	Max.
A	0.40	-	0.50
A1	0.00	-	0.05
A3	0.125 Ref.		
D	0.95	1.00	1.05
E	0.55	0.60	0.65
b	0.20	0.25	0.30
L	0.45	0.50	0.55
e	0.65 Typ.		

Recommend land pattern (Unit: mm)

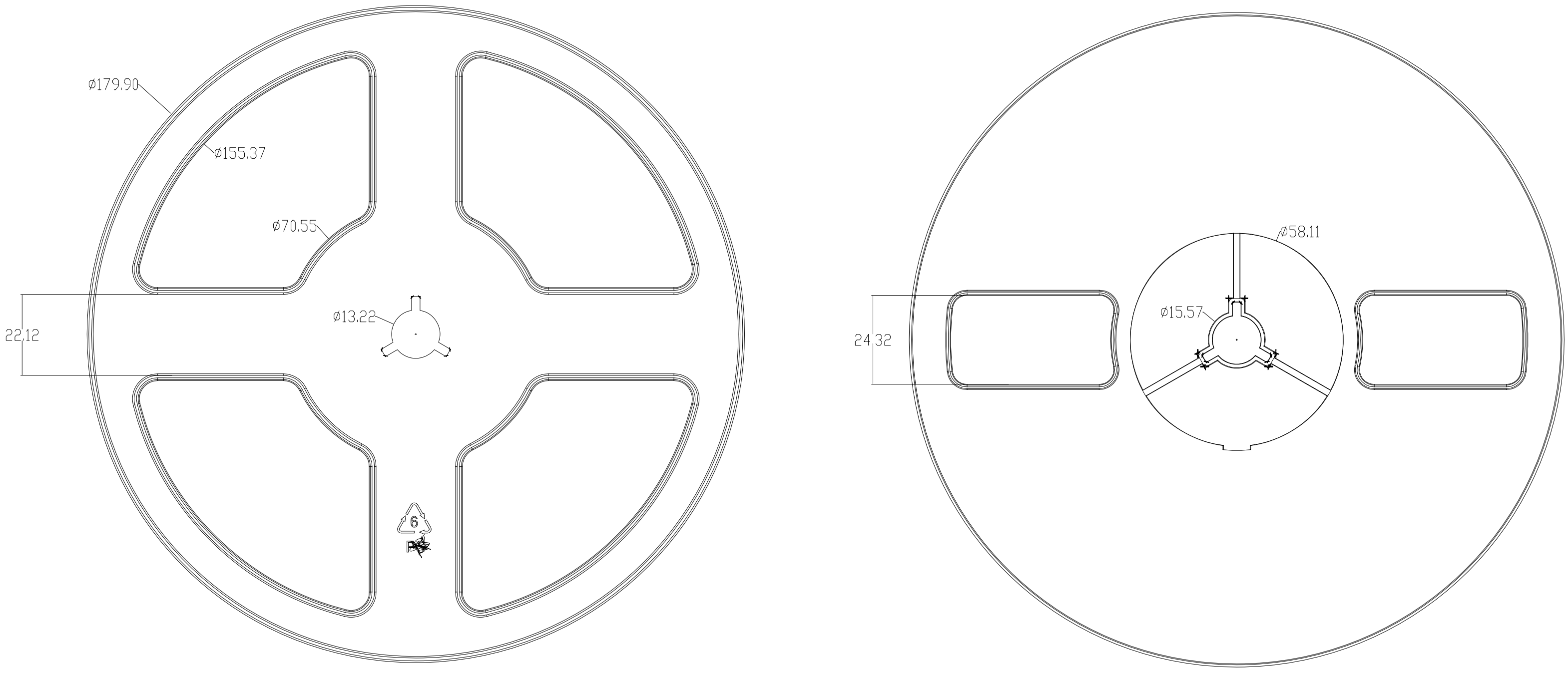


Notes:
This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met.

Tape size


4.00±0.10
4.00±0.10
2.00±0.05
ø1.5±0.1
1.75±0.10
$8.00^{+0.30}_{-0.10}$
W
3.50±0.10
ø0.40±0.10
0.70±0.05
A0
2.5°
0.55±0.05
K0
1.15±0.05
B0
2.5°
T=0.20±0.03


1.46
9.04
1.11


ø179.90
ø155.37
ø70.55
ø13.22
22.12
6
ø58.11
ø15.57
24.32