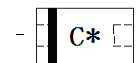


WSB5539N
0.5A, Schottky Barrier Diode
[Http://www.sh-willsemi.com](http://www.sh-willsemi.com)
Features

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


DFN1006-2L

Circuit

Marking
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	$R_{\theta(j-a)}$	Junction to ambient			500	K/W

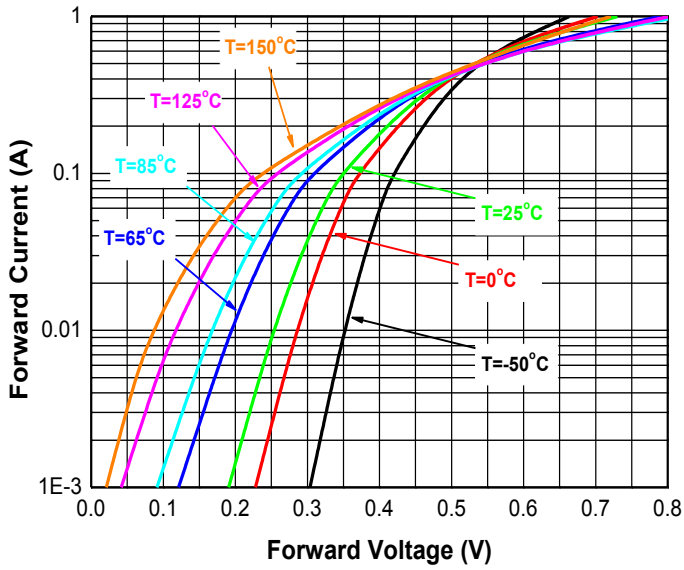
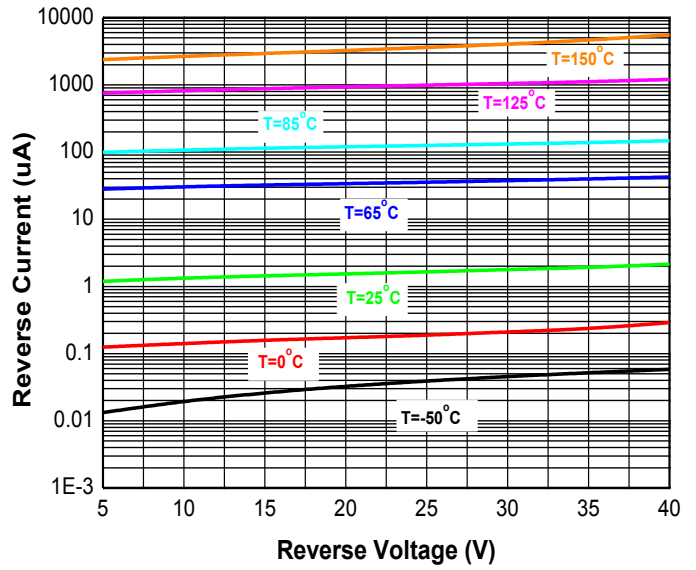
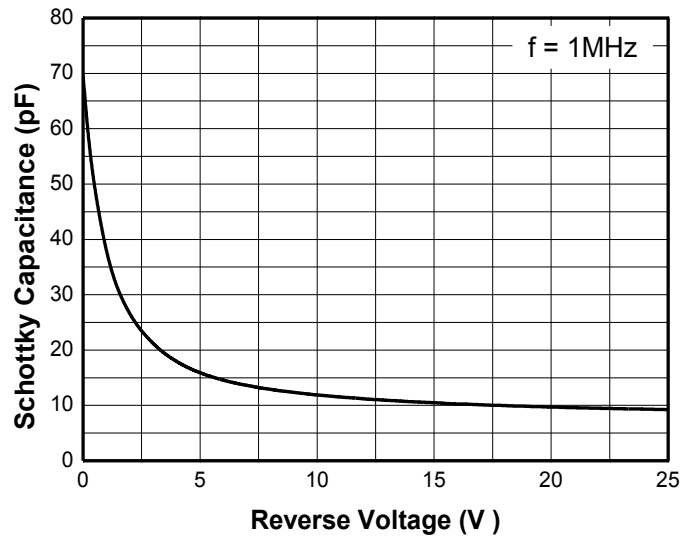
Order Informations

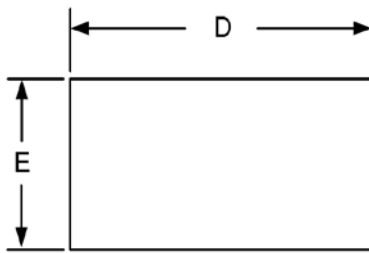
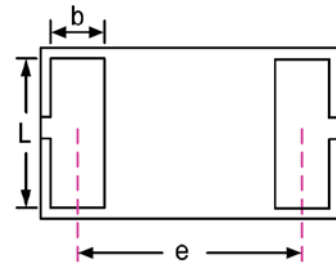
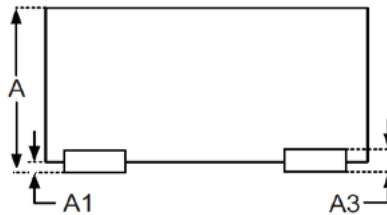
Device	Package	Marking	Shipping
WSB5539N-2/TR	DFN1006-2L	C* ⁽³⁾	10000/Reel&Tape

Note 1 : Pulse Width=8.3ms, Single Pulse;

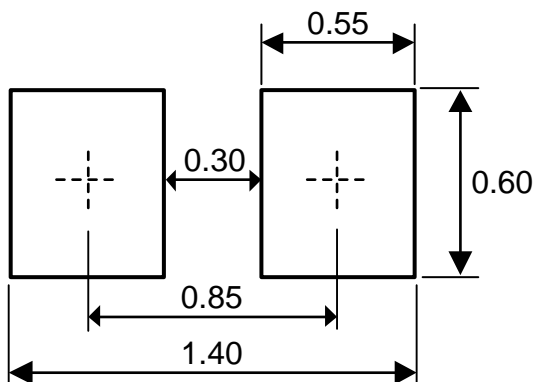
Note 2 : Pulse Width=1ms,Duty cycle=0.25;

Note 3 : * = Month code (A~Z); C = Device code;

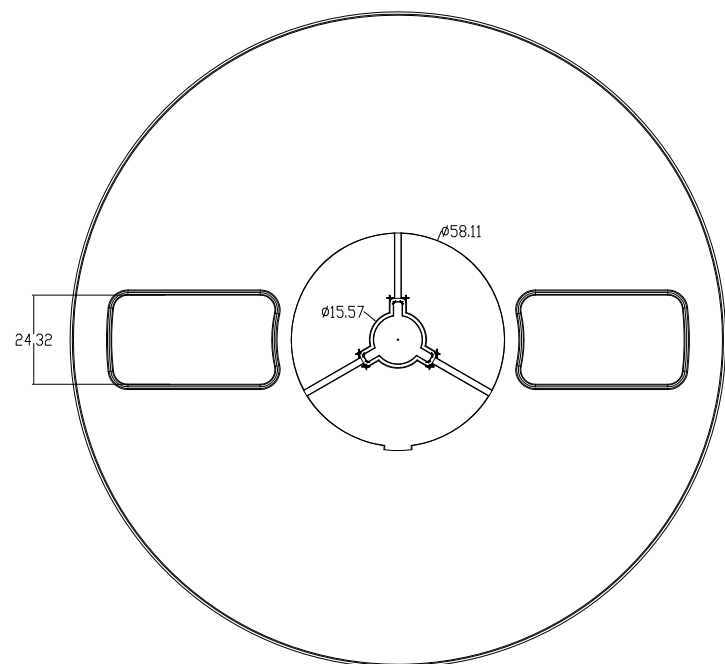
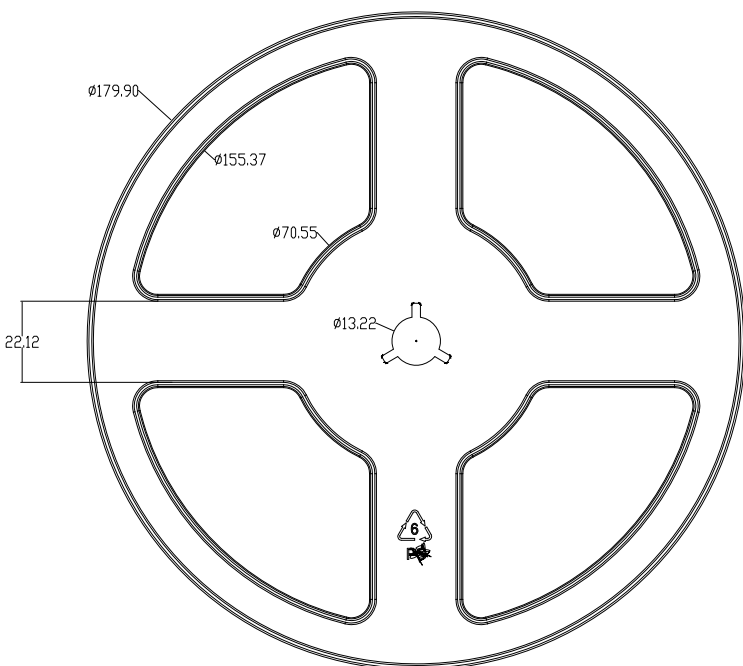
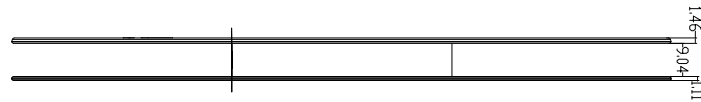
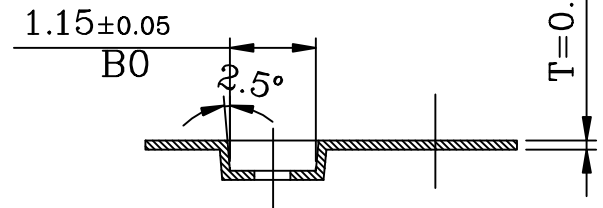
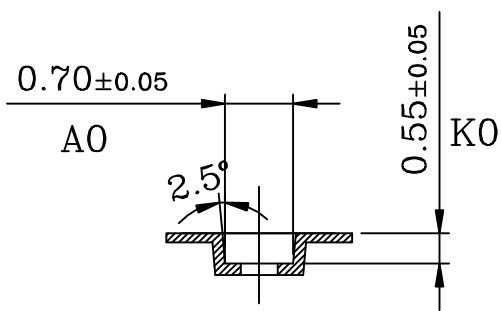
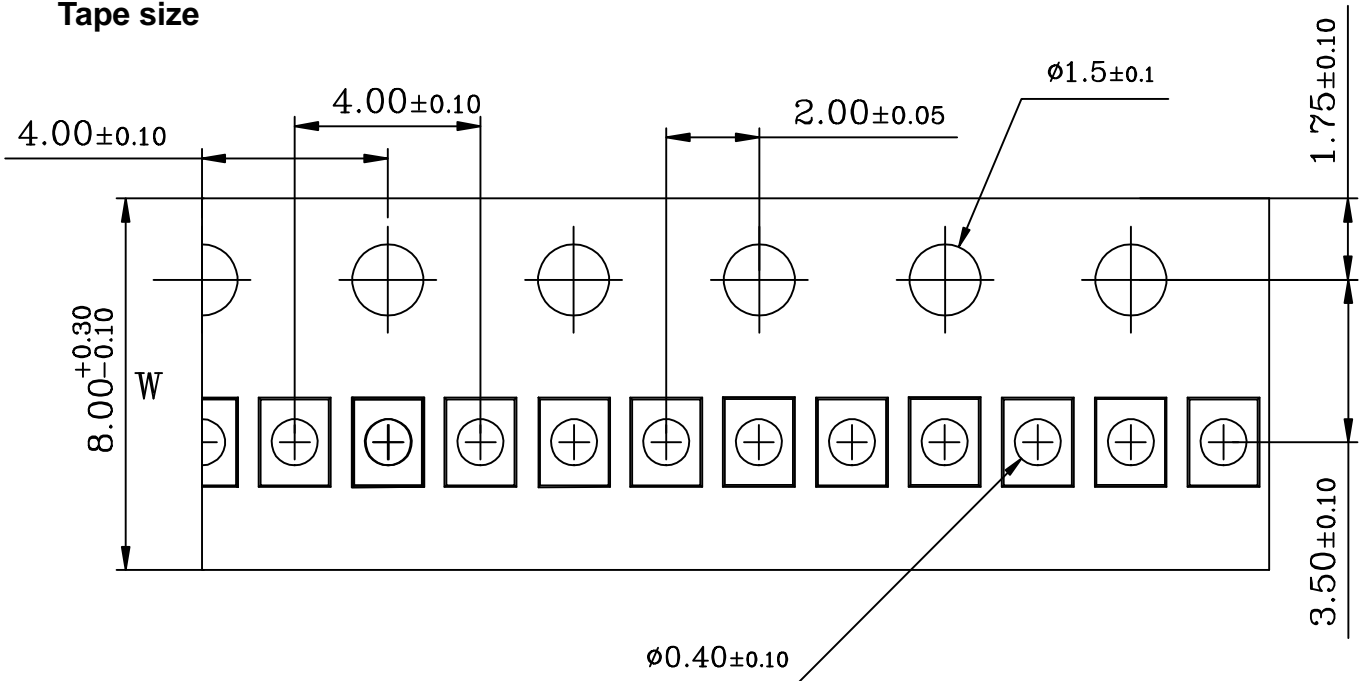
Typical characteristics (Ta=25°C, unless otherwise noted)

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


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