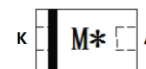


**WSB5546N**
**0.2A, Schottky Barrier Diode**
[Http://www.sh-willsemi.com](http://www.sh-willsemi.com)
**Features**

- Low reverse current
- 0.2A Average rectified forward current
- 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	$I_O$	0.2	A
Peak forward current <sup>(1)</sup>	$I_{FSM}$	3	A
Junction temperature	$T_J$	150	°C
Operating temperature	$T_{opr}$	-40 ~ 150	°C
Storage temperature	$T_{stg}$	-55 ~ 150	°C

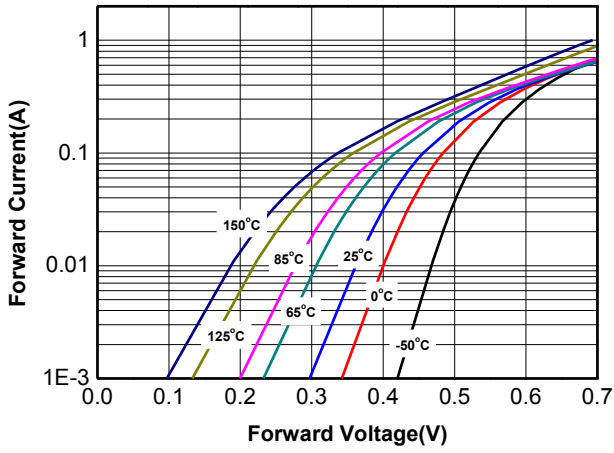
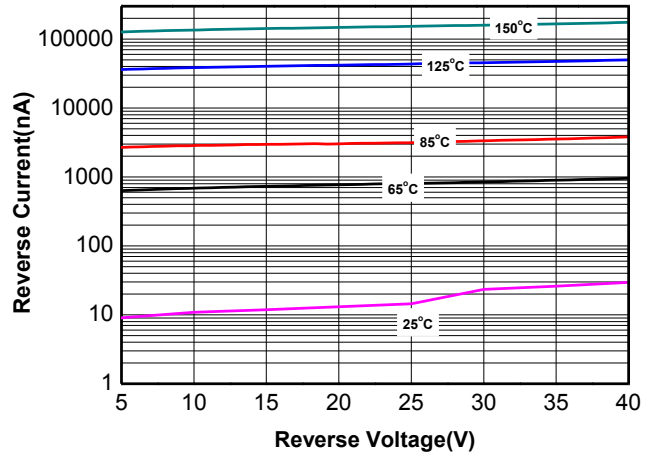
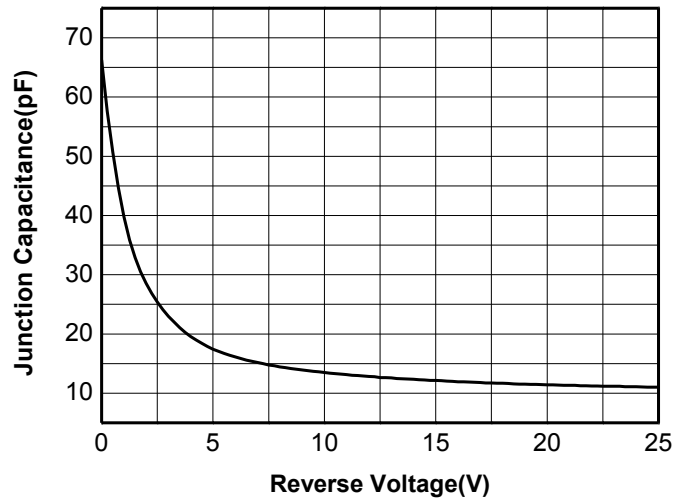
**Electronics characteristics ( $T_A=25^{\circ}C$ )**

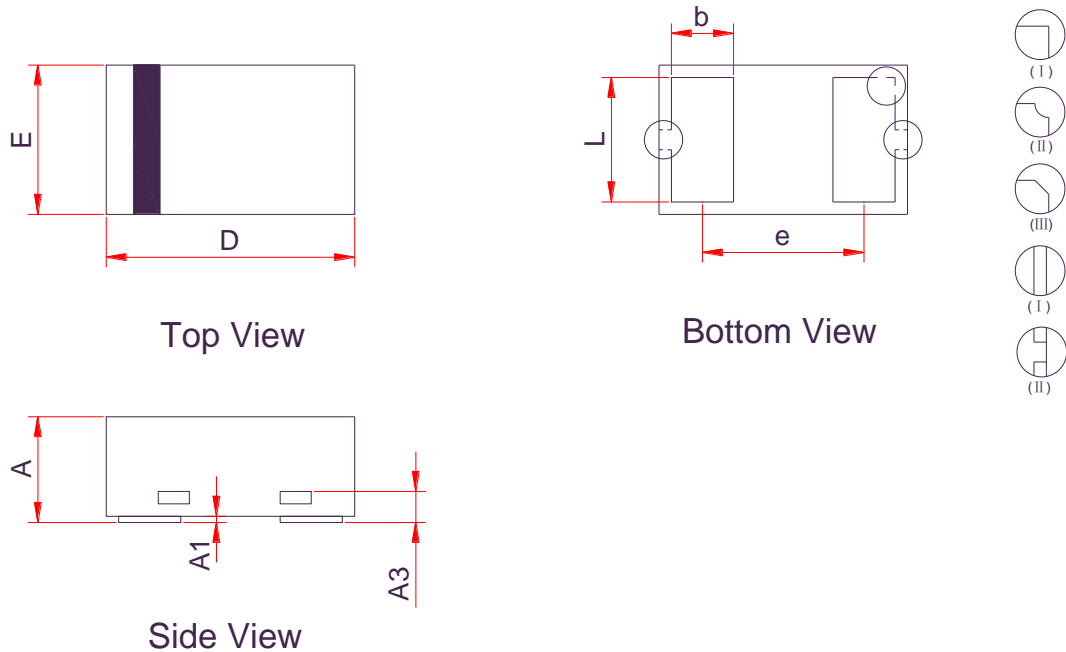
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward voltage <sup>(2)</sup>	$V_F$	$I_F=0.2A$	-	0.51	0.60	V
Reverse current	$I_R$	$V_R=10V$	-	-	0.5	uA
		$V_R=40V$	-	-	1	uA
Junction capacitance	$C_J$	$V_R=4V, F=1MHz$	-	17	-	pF
Thermal resistance	$R_{\theta(j-a)}$	Junction to ambient	-	-	500	K/W

**Order Informations**

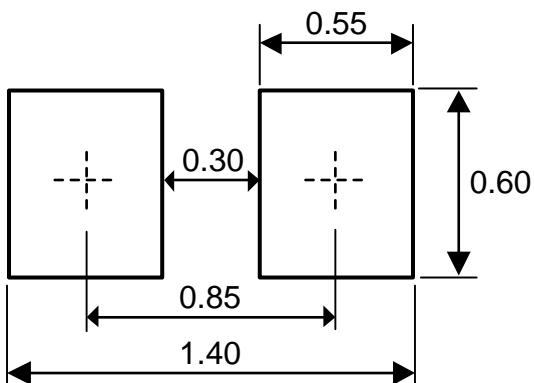
Device	Package	Marking	Shipping
WSB5546N-2/TR	DFN1006-2L	$M^*$ <sup>(3)</sup>	10000/Reel&Tape

**Note 1: Pulse Width=8.3ms, Single half-sine Pulse;**
**Note 2: Pulse Width<380us;**
**Note 3:\* = Month code (A-Z); M = Device code;**

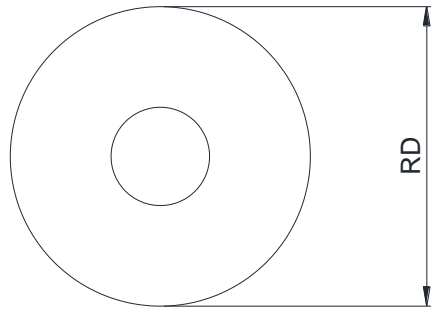
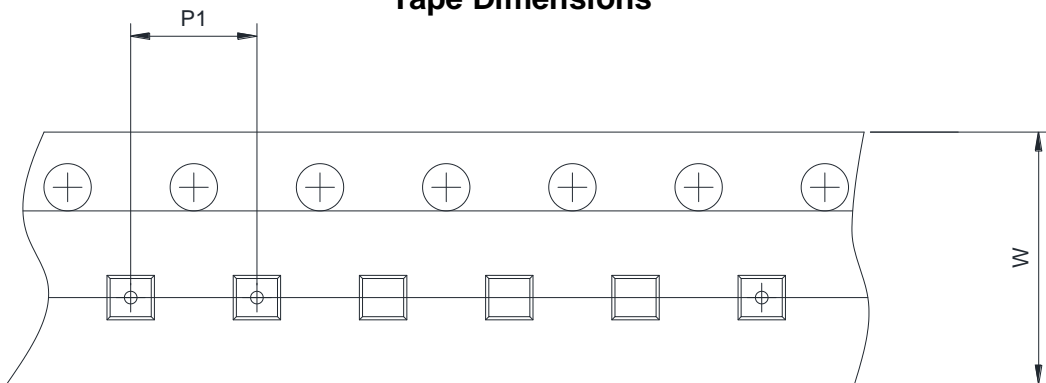
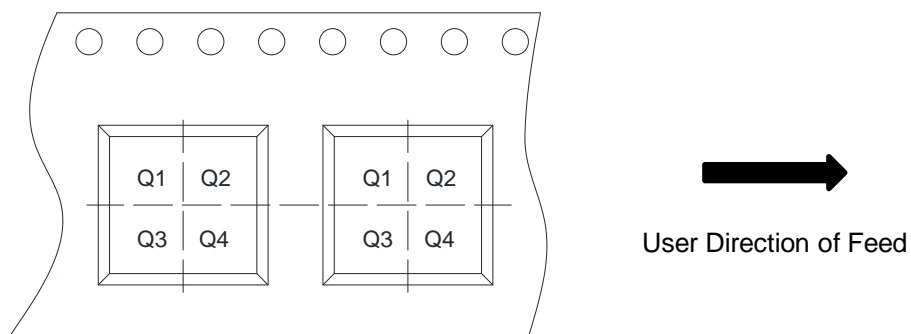
**Typical characteristics (Ta=25°C, unless otherwise noted)**

**Forward voltage vs. Forward current**

**Reverse current vs. Reverse voltage**

**Junction capacitance vs. Reverse voltage**

**PACKAGE OUTLINE DIMENSIONS**
**DFN1006-2L**


Symbol	Dimensions in Millimeters		
	Min.	Typ.	Max.
A	0.34	0.45	0.53
A1	0.00	0.02	0.05
A3	0.12 Ref.		
D	0.95	1.00	1.08
E	0.55	0.60	0.68
b	0.20	0.25	0.30
L	0.45	0.50	0.55
e	0.65 BSC		

**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 AND REEL INFORMATION**
**Reel Dimensions**

**Tape Dimensions**

**Quadrant Assignments For PIN1 Orientation In Tape**


RD	Reel Dimension	<input checked="" type="checkbox"/> 7inch	<input type="checkbox"/> 13inch
W	Overall width of the carrier tape	<input checked="" type="checkbox"/> 8mm	<input type="checkbox"/> 12mm <input type="checkbox"/> 16mm
P1	Pitch between successive cavity centers	<input checked="" type="checkbox"/> 2mm	<input type="checkbox"/> 4mm <input type="checkbox"/> 8mm
Pin1	Pin1 Quadrant	<input checked="" type="checkbox"/> Q1	<input checked="" type="checkbox"/> Q2 <input type="checkbox"/> Q3 <input type="checkbox"/> Q4