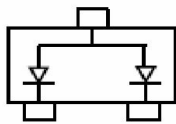
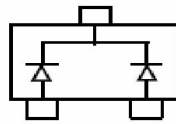
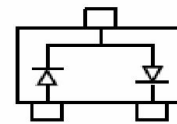


**WSB5520F/5521F/5522F**
[Http://www.willsemi.com](http://www.willsemi.com)
**Schottky Barrier Diode**
**Features**

- Extremely Fast Switching Speed
- Standard products are Pb-free and Halogen-free


**SOT-23**

 WSB5520F  
 MARKING:KL2

 WSB5521F  
 MARKING:KL3

 WSB5522F  
 MARKING:KL4

**Order information**

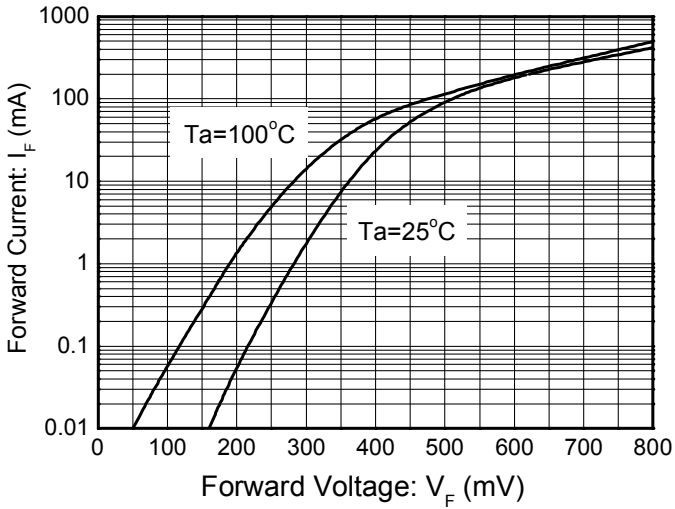
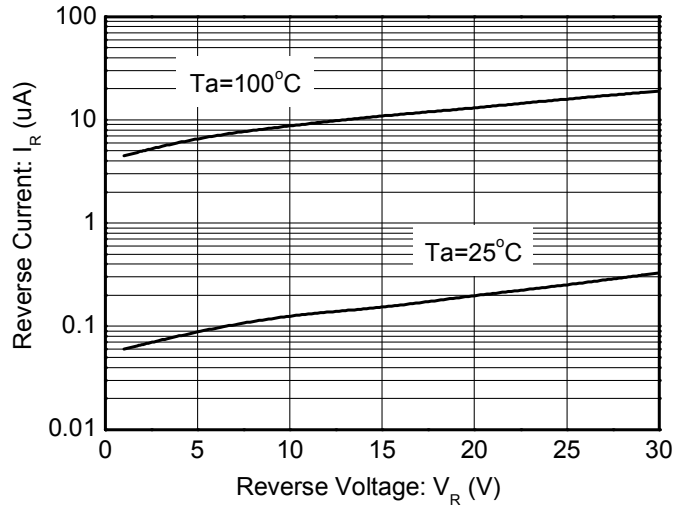
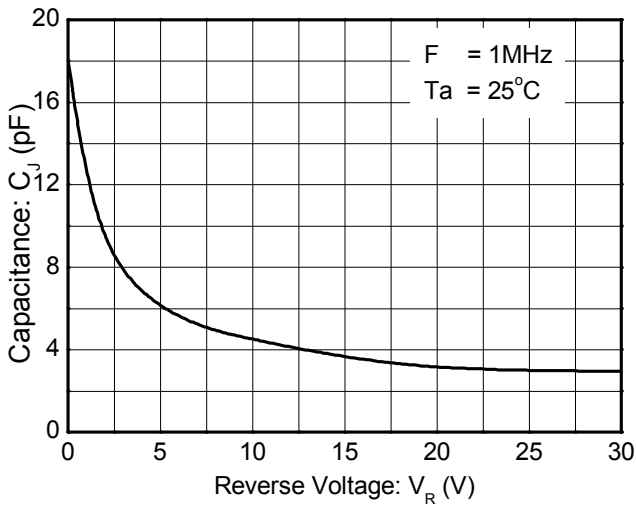
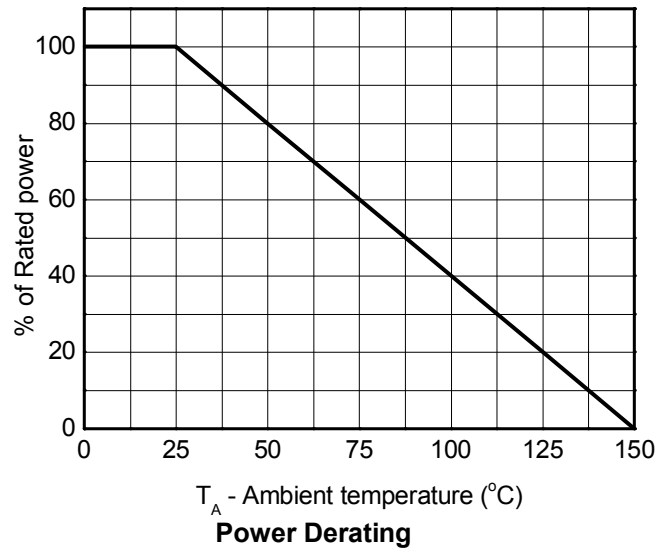
Device	Package	Shipping
WSB5520F-3/TR	SOT-23	3000/Tape&Reel
WSB5521F-3/TR	SOT-23	3000/Tape&Reel
WSB5522F-3/TR	SOT-23	3000/Tape&Reel

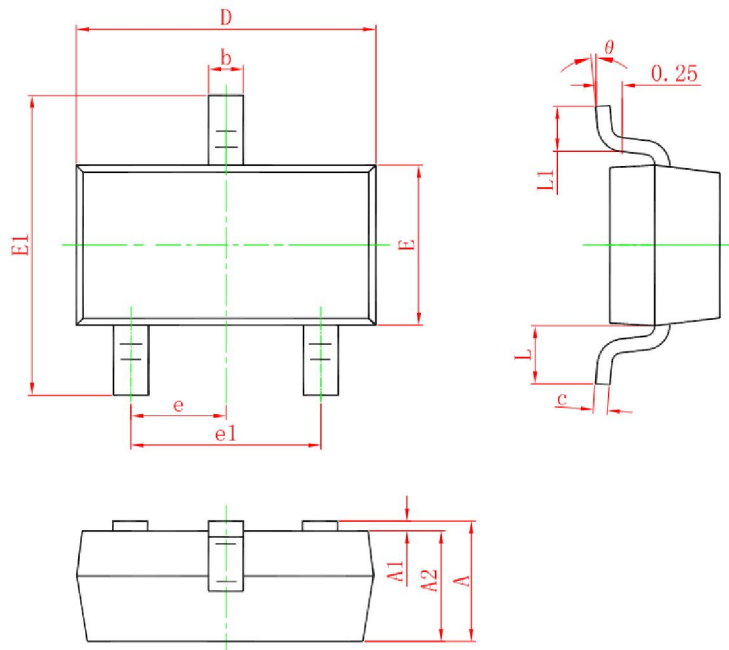
**Absolute maximum ratings**

Parameter	Symbol	Value	Unit
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$	30	V
Working Peak Reverse Voltage	$V_{RWM}$	30	V
Blocking voltage (DC)	$V_R$	30	V
Forward Continuous Current	$I_{FM}$	0.2	A
Power Dissipation	$P_D$	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	$^{\circ}C/W$
Junction temperature	$T_J$	125	$^{\circ}C$
Storage temperature	$T_{STG}$	-55 ~ 150	$^{\circ}C$

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	$V_{BR}$	$I_R=100\mu A$	30			V
Forward voltage	$V_{F1}$	$I_F=0.1mA$			0.24	V
	$V_{F2}$	$I_F=1mA$			0.32	V
	$V_{F3}$	$I_F=10mA$			0.40	V
	$V_{F4}$	$I_F=30mA$			0.50	V
	$V_{F5}$	$I_F=100mA$			1	V
	Reverse current	$I_R$	$V_R=25V$			2
Diode capacitance	$C_D$	$V_R=1V, f=1MHz$			10	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10mA$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$			5	ns

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

**Forward voltage vs. Forward current**

**Reverse current vs. Reverse voltage**

**Junction capacitance vs. Reverse voltage**

**Power Derating**  
 $T_A$  - Ambient temperature ( $^\circ\text{C}$ )

**Package outline dimensions**
**SOT-23**


Symbol	Dimensions in millimeter		
	Min.	Typ.	Max.
A	0.900	1.025	1.150
A1	0.000	0.500	0.100
A2	0.900	0.975	1.050
b	0.300	0.400	0.500
c	0.080	0.115	0.150
D	2.800	2.900	3.000
E	1.200	1.300	1.400
E1	2.250	2.400	2.550
e	0.950TYP		
e1	1.800	1.900	2.000
L	0.500REF		
L1	0.300	0.400	0.500
$\theta$	0°	4°	8°

**Recommend PCB Layout (Unit: mm)**
