WSB5519F/5520F/5521F/5522F

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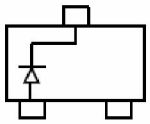
Schottky Barrier Diode

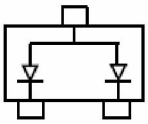
SOT-23

Features

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



WSB5519F
MARKING:KL1



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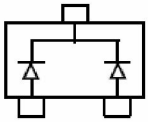

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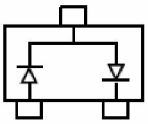


WSB5522F
MARKING:KL4

Order information

Device	Package	Shipping
WSB5519F-3/TR	SOT-23	3000/Tape&Reel
WSB5520F-3/TR	SOT-23	3000/Tape&Reel
WSB5521F-3/TR	SOT-23	3000/Tape&Reel
WSB5522F-3/TR	SOT-23	3000/Tape&Reel

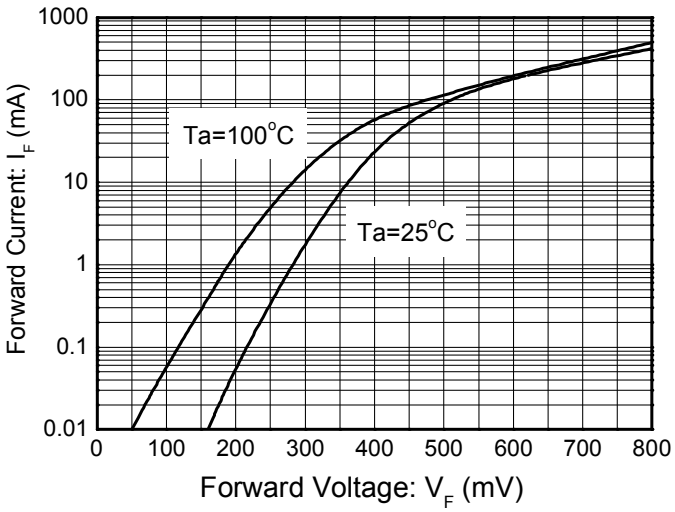
Absolute maximum ratings

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	℃/W
Junction temperature	T_J	125	℃
Storage temperature	T_{STG}	-55 ~ 150	℃

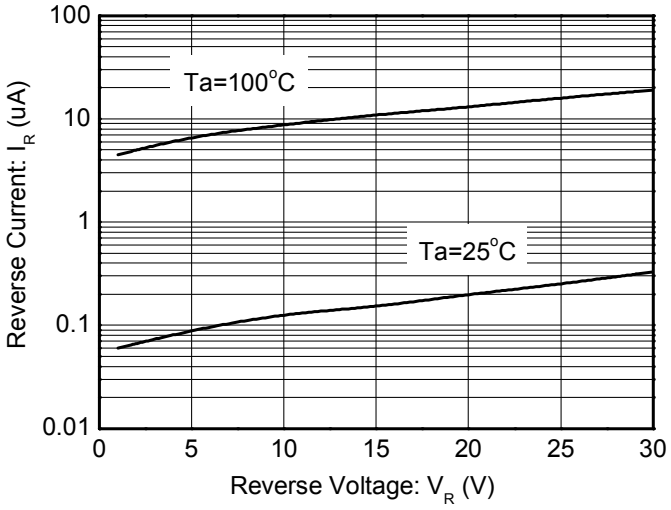
Electronics characteristics (T_A=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	V_{BR}	I_R=100uA	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	μA
Diode capacitance	C_D	V_R=1V,f=1MHz			10	pF
Reverse recovery time	t_{rr}	I_F=I_R=10mA I_{rr}=0.1XI_R,R_L=100Ω			5	ns

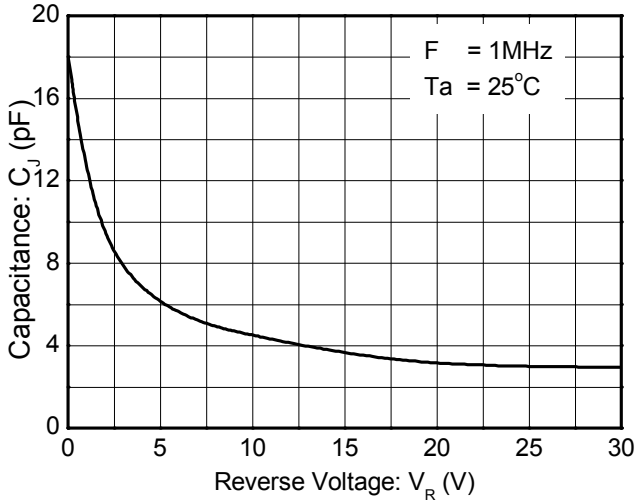
Typical characteristics (Ta=25°C, unless otherwise noted)



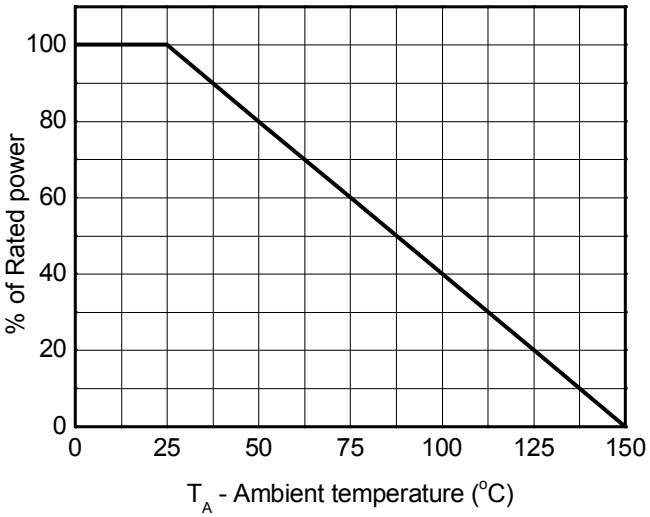
Forward voltage vs. Forward current



Reverse current vs. Reverse voltage



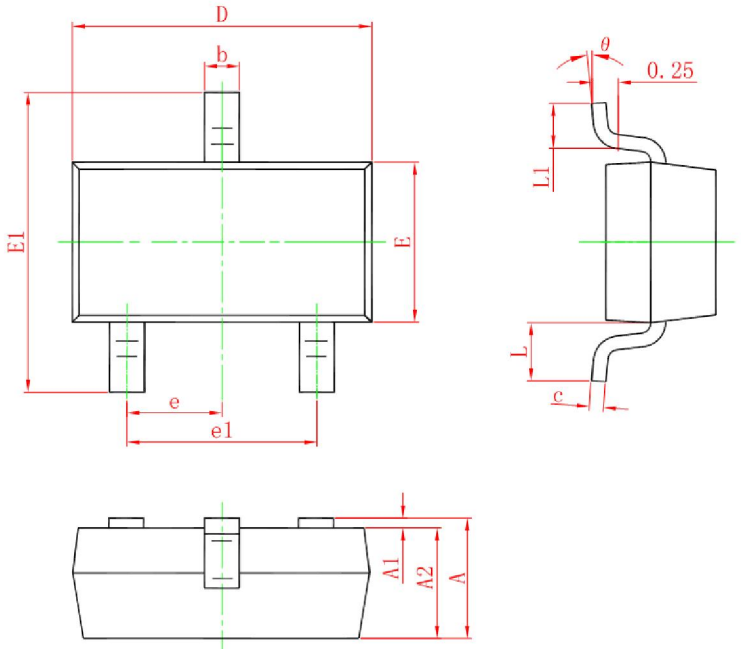
Junction capacitance vs. Reverse voltage



Power Derating

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
θ	0°	4°	8°

Recommend PCB Layout (Unit: mm)