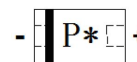


WSB5524D
Middle Power Schottky Barrier Diode
[Http://www.sh-willsemi.com](http://www.sh-willsemi.com)
Features

- 1.5A Average rectified forward current
- Low forward voltage, Low leakage current
- FBP package


FBP1608-02L

Circuit

Marking
Applications

- Switching circuit
- Middle current rectification

Absolute maximum ratings

Parameter	Symbol	Value	Unit
Reverse voltage (repetitive peak)	V_{RRM}	40	V
Reverse voltage (DC)	V_R	40	V
Average forward current ⁽¹⁾	$I_{F(AV)}$	1.5	A
Forward Peak Surge Current ⁽²⁾	I_{FSM}	7	A
Junction temperature	T_J	125	°C
Operating temperature	T_{opr}	-40 ~ 125	°C
Storage temperature	T_{stg}	-55 ~ 150	°C

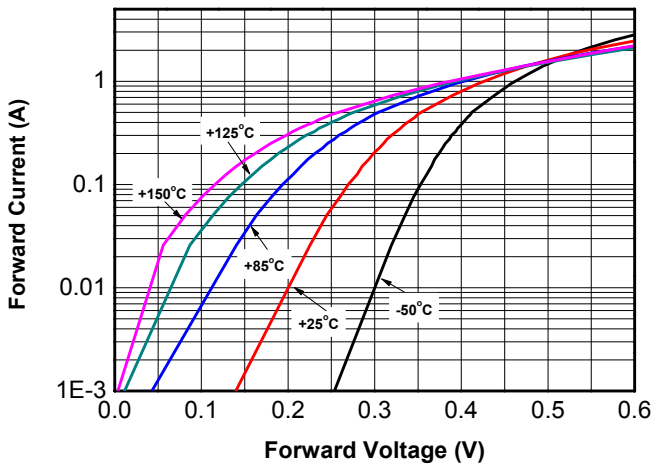
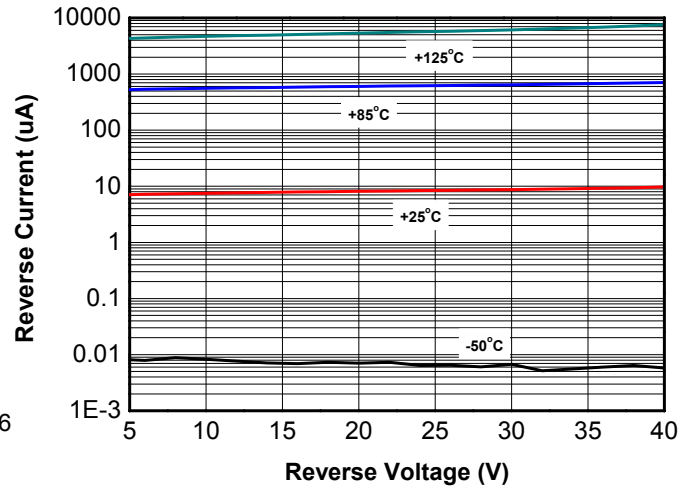
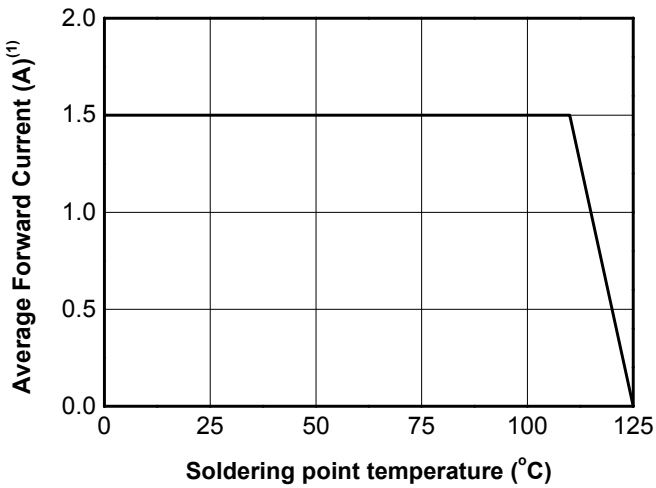
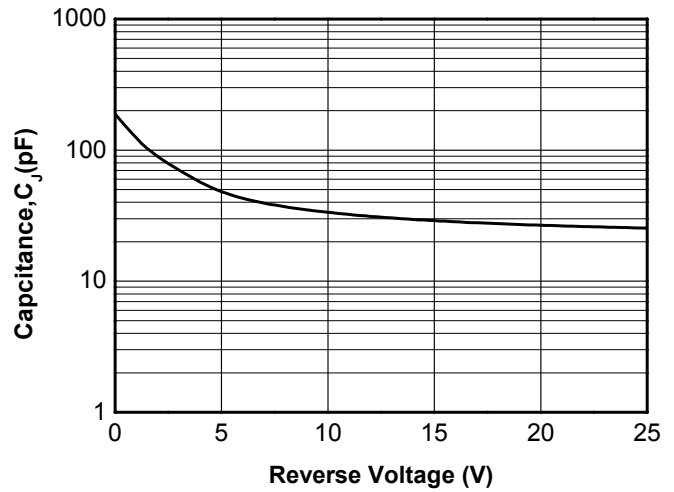
Electronics characteristics ($T_A=25^\circ\text{C}$)

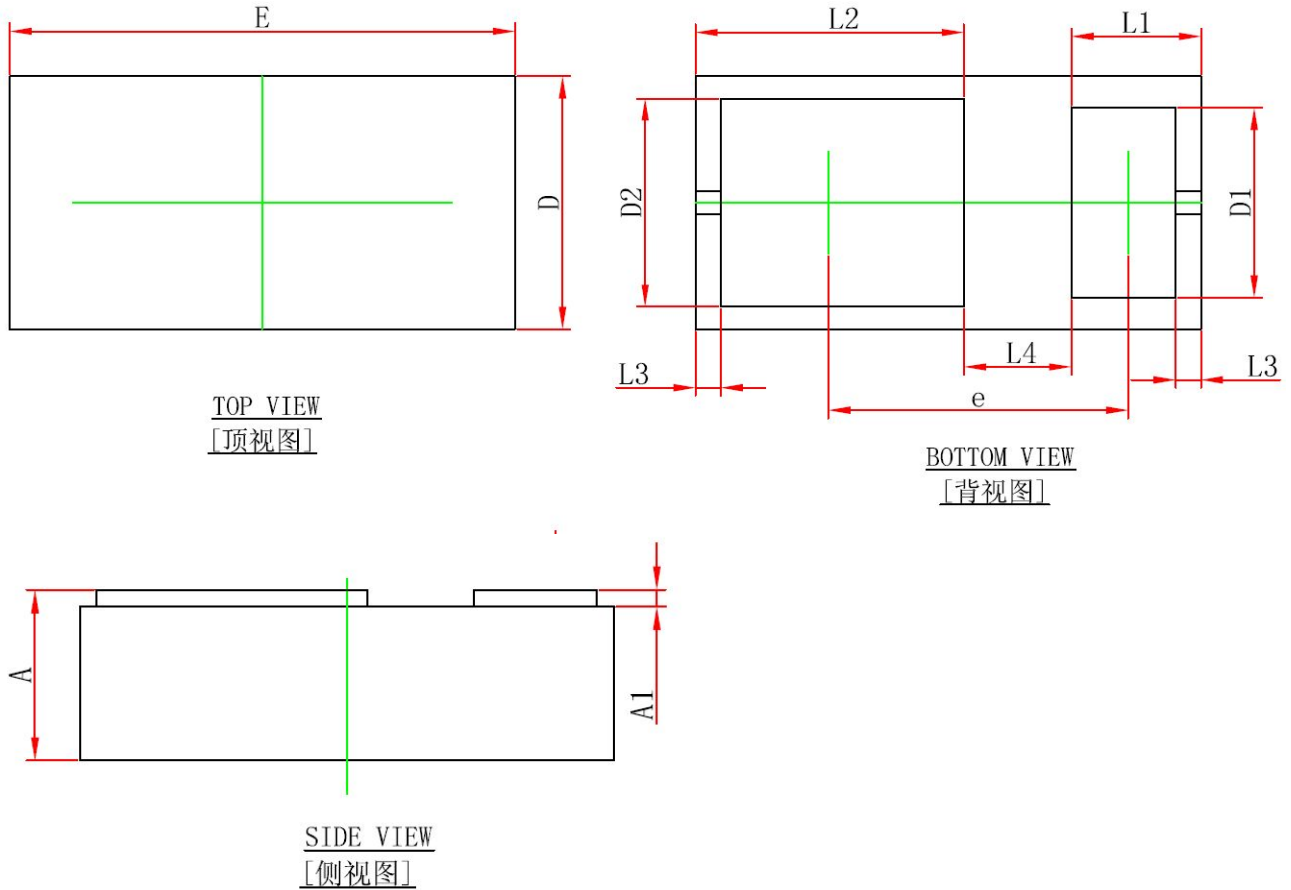
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward voltage ⁽³⁾	V_F	$I_F=1.5\text{A}$		0.50	0.60	V
Reverse current	I_R	$V_R=40\text{V}$			0.1	mA
Junction capacitance	C_J	$V_R=4\text{V}, F=1\text{MHz}$		57	70	pF
Thermal resistance	$R_{\theta(J-SP)}$	Junction to soldering point of cathode tab			20	K/W

Order Informations

Device	Package	Marking	Shipping
WSB5524D-2/TR	FBP1608-02L(1.6*0.8)	P* ⁽⁴⁾	10000/Reel&Tape

Note1: Duty cycle=0.5, f=20kHz, square wave;
Note2: Pulse width=8.3ms, single pulse;
Note3: Single Pulse, test $T_p=380\mu\text{s}$;
Note4: * = Month code (A~Z); P = Device code;

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

Fig.1 Forward voltage vs. Forward current

Fig.2 Reverse current vs. Reverse voltage

Fig.3 Average Forward Current Derating Curve

Fig.4 Junction capacitance vs. Reverse voltage

Package outline dimensions
FBP1608-02L(1.6*0.8*0.5)


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.450	0.550	0.018	0.022
A1	0.010	0.090	0.000	0.004
D	0.750	0.850	0.030	0.033
D1	0.520	0.680	0.020	0.027
D2	0.600	0.760	0.024	0.030
E	1.550	1.650	0.061	0.065
L1	0.410 REF.		0.016 REF.	
L2	0.850 REF.		0.033 REF.	
L3	0.080 REF.		0.003 REF.	
L4	0.340 REF.		0.013 REF.	
e	0.900	1.000	0.035	0.039