WSB5523D

Middle Power Schottky Barrier Diode **Http://www.sh-willsemi.com**

Features

- 1 A 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_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average Forward current (1)	$I_{F(AV)}$	1.0	A
Repetitive Peak Forward Current@tp≤1ms, duty≤25%	I_{FRM}	4	A
Forward Peak Surge Current @t=8.3ms (single pluse)	I_{FSM}	7	A
Junction temperature	T_J	150	°C
Operating temperature	Topr	-40 ~ 150	°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=500mA(2)		0.40	0.5	V
		I_F=1A(2)		0.48	0.62	V
Reverse current	I_R	V_R=40V			0.1	mA
Junction capacitance	C_J	V_R=4V, F=1MHz			35	pF

Order Informations

Device	Package	Marking	Shipping
WSB5523D-2/TR	FBP1608-02L(1.6*0.8)	*23(3)	10000/Reel&Tape

Thermal Resistance Ratings

Symbol	Parameter	Max.	Unit
$R_{\theta Jsp}$	Thermal Resistance, Junction to soldering point of cathode tab	20	K/W

Note 1: Duty cycle=0.5, f=20kHz, square wave；

Note 2: Pulsed test, $t_p \leqslant 380us$, T_j=25℃；

Note 3: ＊= Month code (A~Z); 23= Device code；

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

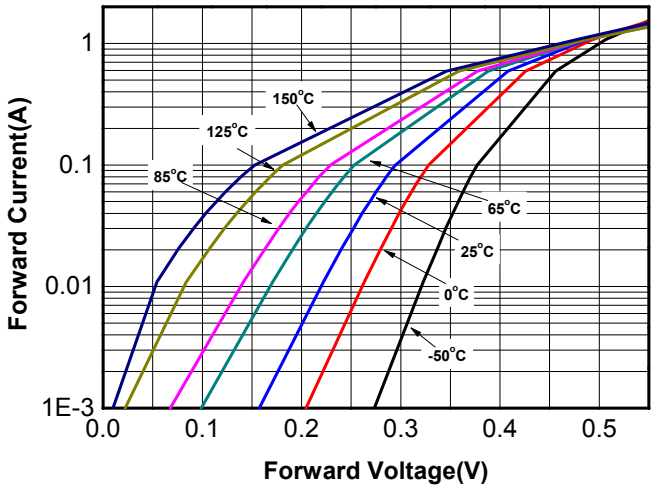


Fig.1 Forward voltage vs. Forward current

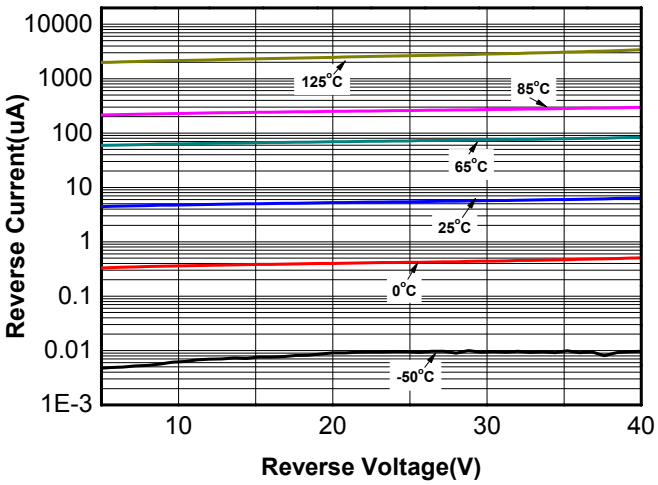


Fig.2 Reverse current vs. Reverse voltage

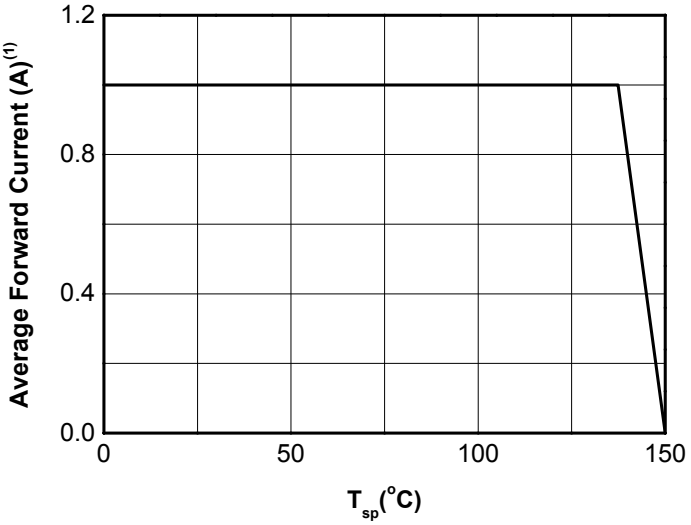


Fig.3 Average Forward Current Derating Curve

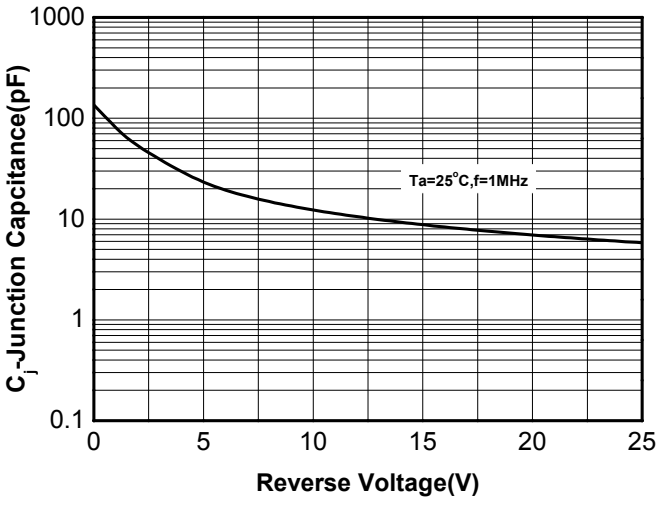
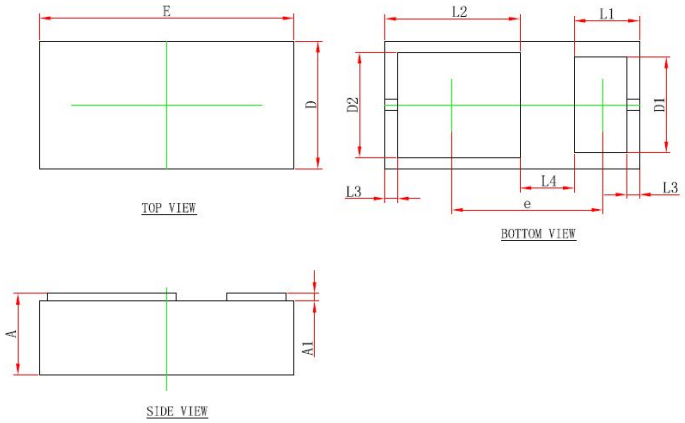


Fig.4 Junction capacitance vs. Reverse voltage

FBP1608-02L(1.6*0.8*0.5)

Package outline dimensions



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

Standard Packing