

**WSB5557Z**
**Schottky Barrier Diode**
[Http://www.sh-willsemi.com](http://www.sh-willsemi.com)
**Features**

- 100mA Average rectified forward current
- Low forward voltage
- Ultra-low leakage current
- Small package DFN0603-2L


**DFN0603-2L(Bottom View)**

**Circuit**

**Marking**
**Applications**

- Low Current rectification

**Absolute maximum ratings**

Parameter	Symbol	Value	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	30	V
Reverse voltage (DC)	$V_R$	30	V
Average rectified forward current	$I_O$	100	mA
Peak forward surge current (8.3ms single sine pluse)	$I_{FSM}$	2	A
Junction temperature	$T_J$	150	°C
Operating temperature	Topr	-40 ~ 150	°C
Storage temperature	Tstg	-40 ~ 150	°C

**Electronics characteristics (T<sub>A</sub>=25°C)**

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse Voltage	$V_R$	$I_R=100\mu A$	30			V
Forward Voltage	$V_F$	$I_F=1mA$			0.36	V
		$I_F=10mA$			0.46	V
Reverse current	$I_R$	$V_R=10V$			0.3	$\mu A$
		$V_R=30V$			0.5	$\mu A$
Junction capacitance	$C_J$	$V_R=5V, F=1MHz$		13		pF
Thermal Resistance	$R_{\theta(JA)}$	Junction to Ambient			650	K/W

**Order Information**

Device	Package	Marking	Shipping
WSB5557Z-2/TR	DFN0603-2L	*H <sup>(1)</sup>	10000/Reel&Tape

**Note 1: \* = Month Code(A~Z); H = Device code;**

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

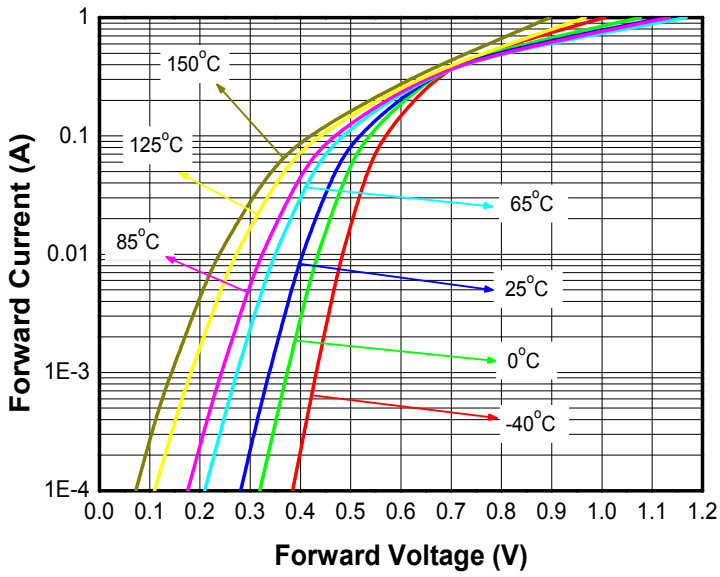


Fig.1 Forward voltage vs. Forward current

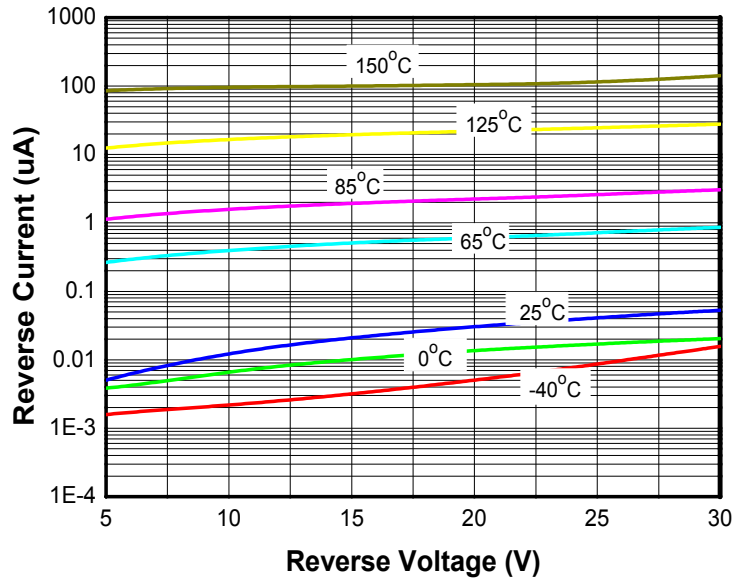


Fig.2 Reverse current vs. Reverse voltage

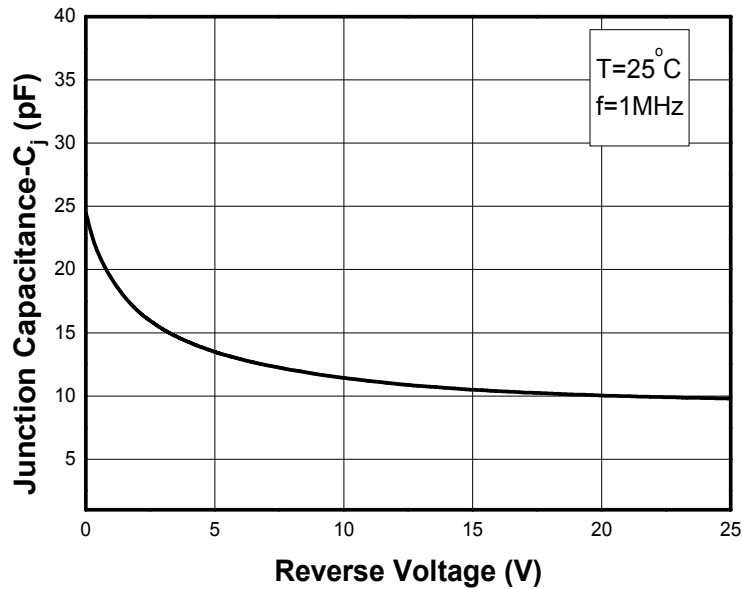
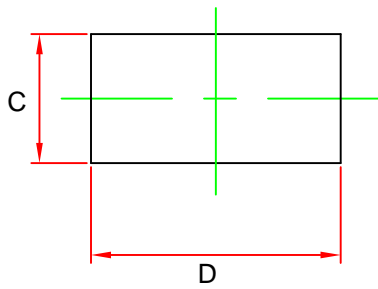
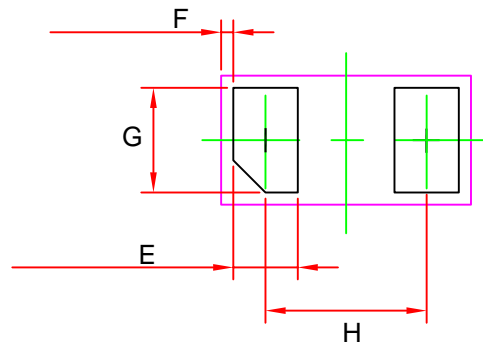
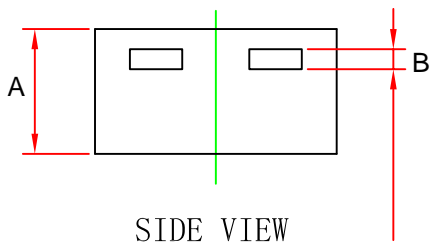
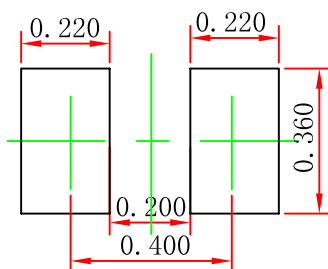


Fig.3 Junction capacitance vs. Reverse voltage

**Package outline dimensions**

TOP VIEW

BOTTOM VIEW

SIDE VIEW

Symbol	Dimensions in millimeter		
	Min.	Typ.	Max.
A	0.275	0.310	0.340
B	0.050 REF.		
C	0.270	0.320	0.370
D	0.570	0.620	0.670
E	0.125	0.160	0.195
F	0.030 REF.		
G	0.225	0.260	0.295
H	0.365	0.400	0.435

**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.