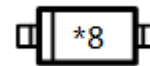


**WSB5518W**
**Middle Power Schottky Barrier Diode**
[Http://www.sh-willsemi.com](http://www.sh-willsemi.com)
**Features**

- 0.5 A Average rectified forward current
- Low forward voltage, low leakage current
- Small package SOD-323


**SOD-323**
**Applications**

- Switching circuit
- Middle current rectification


**Circuit**

**Marking**
**Absolute maximum ratings**

Parameter	Symbol	Value	Unit
Reverse voltage (repetitive peak)	$V_{RRM}$	60	V
Reverse voltage (DC)	$V_R$	60	V
Average rectified forward current	$I_O$	0.5	A
Peak forward surge current <sup>(1)</sup>	$I_{FSM}$	7	A
Junction temperature	$T_J$	125	°C
Operating temperature	$T_{opr}$	-40 ~ 85	°C
Storage temperature	$T_{stg}$	-55 ~ 150	°C

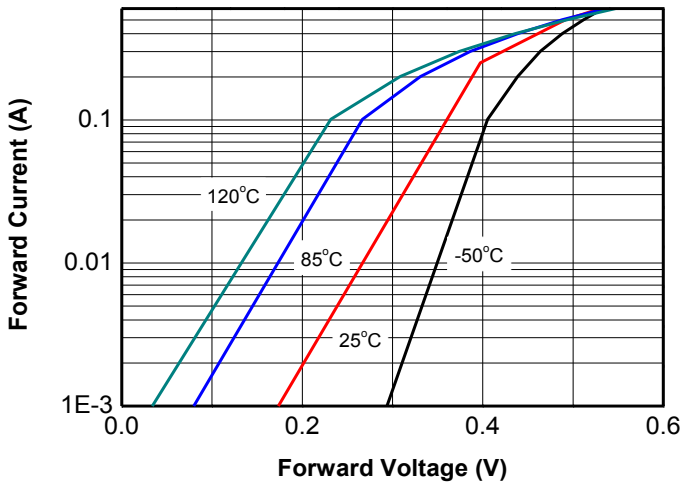
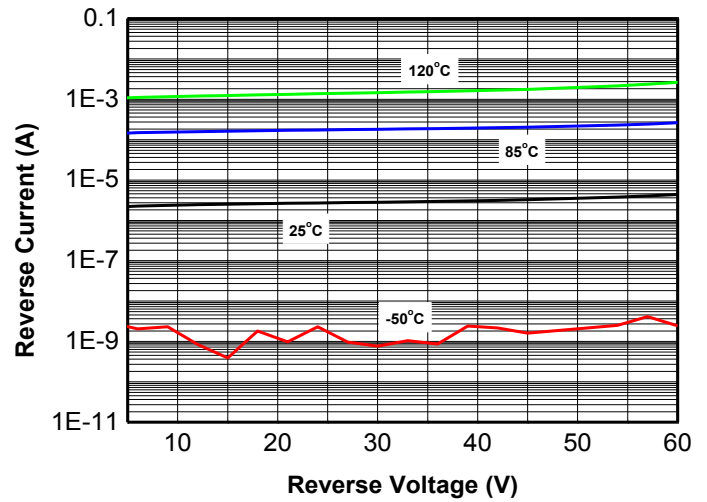
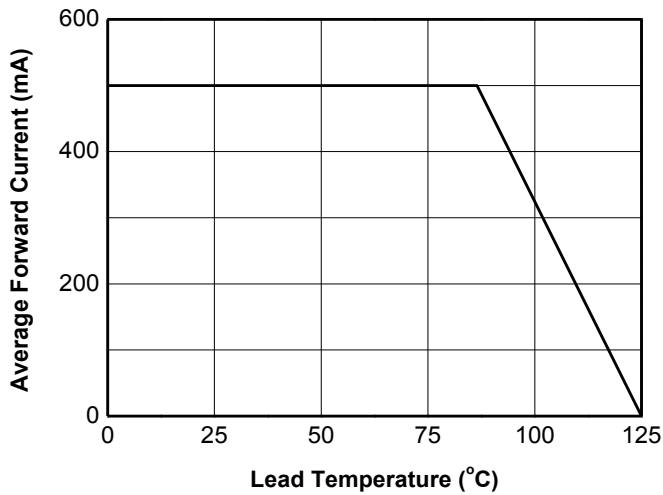
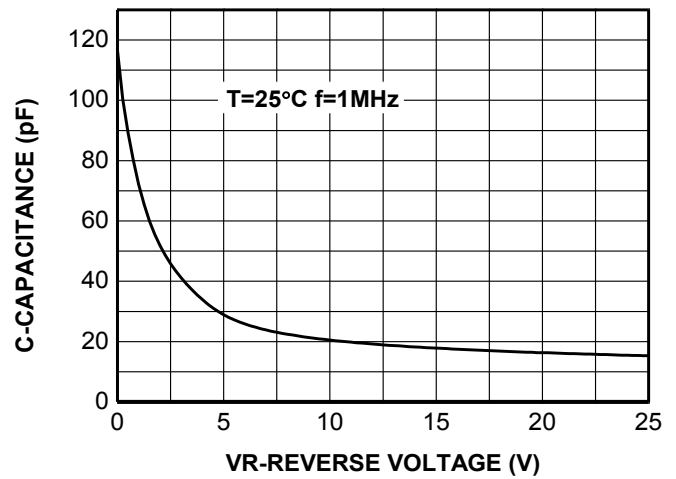
**Electronics characteristics ( $T_A=25^{\circ}C$ )**

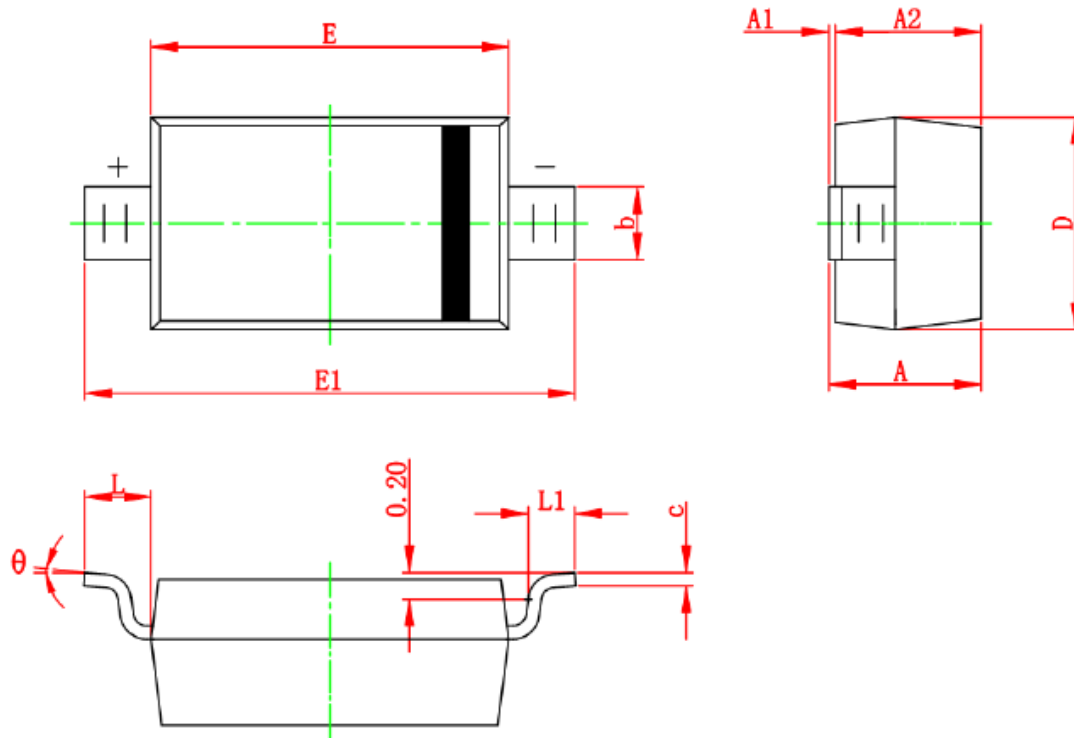
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward voltage <sup>(2)</sup>	$V_F$	$I_F=0.5A$	-	0.5	0.55	V
Reverse current	$I_R$	$V_R=60V$	-	4	100	uA
Junction capacitance	$C_J$	$V_R=4V, F=1MHz$	-	34		pF
Thermal resistance <sup>(3)</sup>	$R_{\theta JL}$	Junction to Lead		108	135	K/W

**Order Informations**

Device	Package	Marking	Shipping
WSB5518W-2/TR	SOD-323	*8 <sup>(4)</sup>	3000/Reel&Tape

**Note 1 : Pulse Width=8.3ms, Single Pulse;**
**Note 2 : Single Pulse test  $t_p=380\mu s$ ;**
**Note 3 : Device mounted on an FR4 PCB, single-sided copper, tin-plated and standard footprint.**
**Note 4 : \* = Month code (A~Z); 8 = 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 Forward Current Derating**

**Fig.4 Junction capacitance vs. Reverse voltage**

**Package outline dimensions**
**SOD-323**


Symbol	Dimensions in millimeters		Dimensions in inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.700	0.098	0.106
L	0.475 (REF)		0.019 (REF)	
L1	0.250	0.450	0.010	0.018
$\theta$	0°	8°	0°	8°