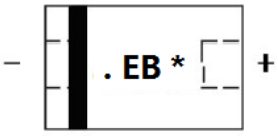
WSB5510M

2A, Schottky Barrier Diode

Http//:www.sh-willsemi.com

SMA (DO-214AC)



. EB = Device code
*** = Month code (A~Z)**
Pin configuration and Marking

Features

- Schottky barrier rectifier
- Guarding protection
- Low forward voltage
- Reverse energy tested
- High current capability
- Extremely low thermal resistance
- Standard products are Pb-free and Halogen-free

MECHANICAL DATA

- Case: SMA molded plastic body
- Polarity: Color band denotes cathode end
- Mounting position: ANY

Order information

Device	Package	Shipping
WSB5510M-2/TR	SMA (DO-214AC)	5000/Tape&Reel

Absolute maximum ratings

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RWS}	28	V
Maximum DC blocking voltage	V_{DC}	40	V
Maximum average forward rectified current at T_L(Fig.2)	$I_{F(AV)}$	2.0	A
Peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	50	A
Operating temperature range	T_J	-55 ~ 125	^oC
Storage temperature range	T_{STG}	-55 ~ 150	^oC

Thermal Characteristics

Parameter	Symbol	Value	Unit
Maximum thermal resistance (Junction to Lead)(Fig.2)	$R_{\theta JL}$	24	$^oC/W$

Electronics characteristics (T_A=25^{o}C)

Parameter	Symbol	Value	Unit
Maximum instantaneous forward voltage @IF=2.0A*	V_F	0.50	V
Maximum reverse current @ V_{DC} (T_J=25^{o}C)	I_R	0.4	mA
Maximum reverse current @ V_{DC} (T_J=100^{o}C)	I_R	10	mA

*: Pulse test, Pulse width 300us, duty cycle 1%

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

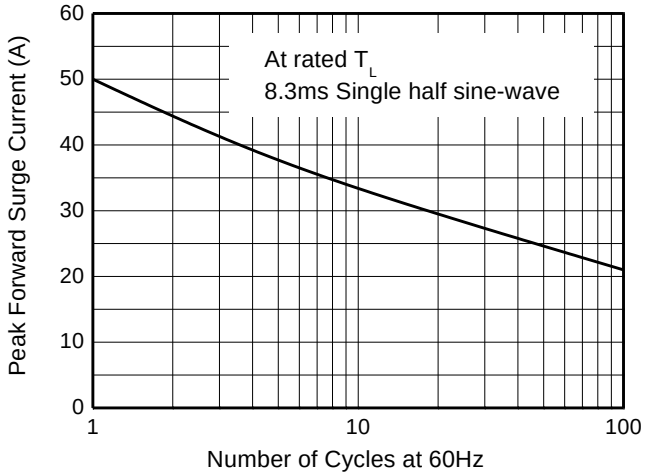


Fig.1: Peak Forward Surge Current

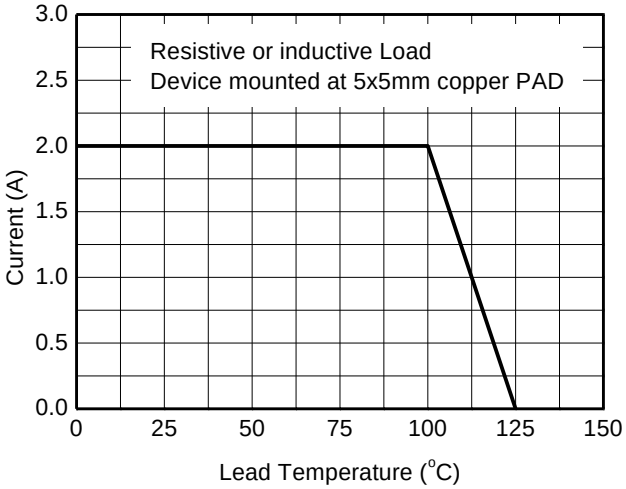


Fig.2: Power Derating Curve

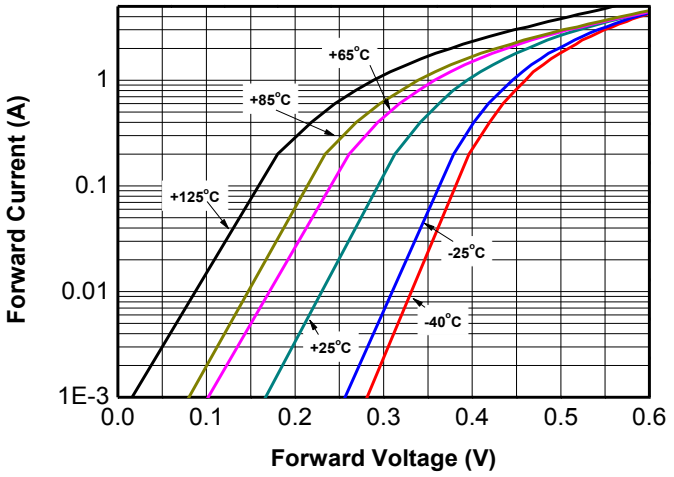


Fig.3: Typical Forward Characteristics

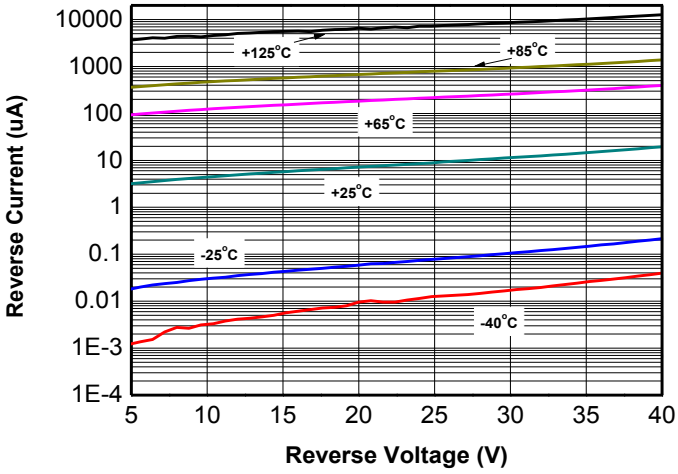


Fig.4: Typical Reverse Characteristics

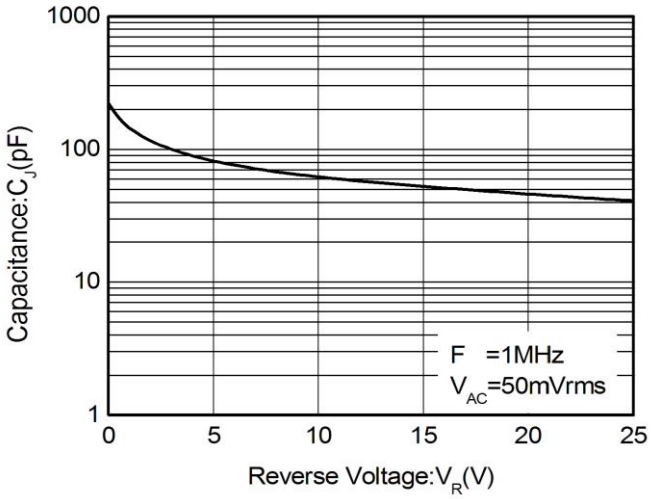


Fig.5: Junction capacitance vs. Reverse voltage

Package outline dimensions

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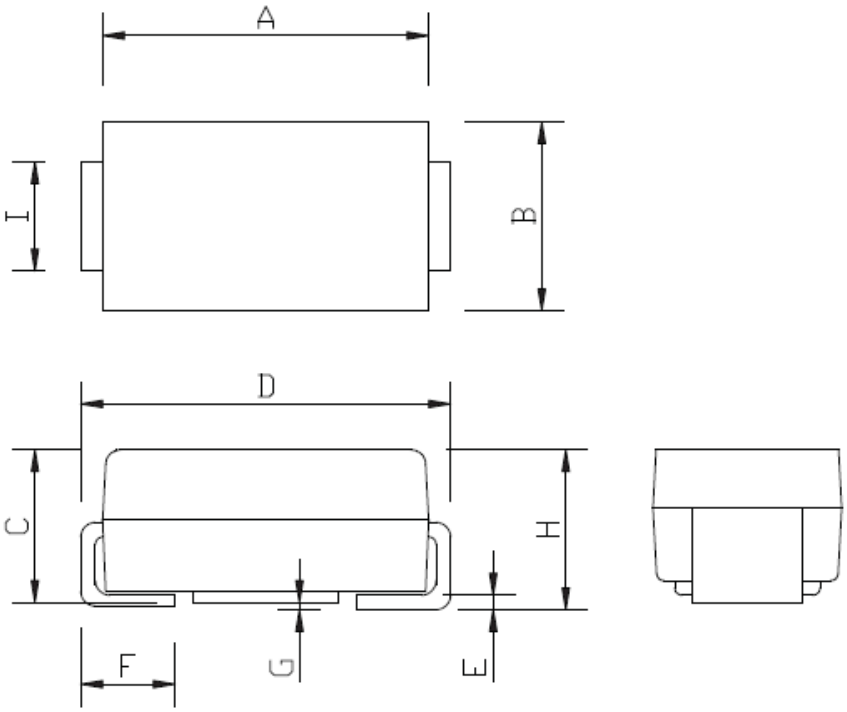

Symbol	Dimensions in millimeter	
	Min.	Max.
A	4.25	4.65
B	2.40	2.80
C	1.85	2.15
D	4.85	5.35
E	0.10	0.30
F	0.90	1.50
G	0.20 Max.	
H	1.90	2.30
I	1.35	1.65