

1A Plastic-Encapsulate Schottky Barrier Diode - 40V
PRIMARY CHARACTERISTICS

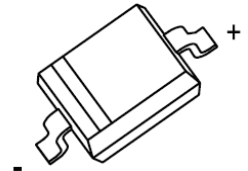
P_D	250mW
V_{RRM}	40V
I_O	1A
V_F	0.6V
T_J	-40°C - 125°C

FEATURES

- For use in low voltage, high frequency inverters
- Free wheeling, and polarity protection applications
- Moisture Sensitivity Level 1

SOD-323
PACKAGE

Marking : SL


MECHANICAL DATA

- Case : Molded plastic,SOD-323
- Polarity : Shown above
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

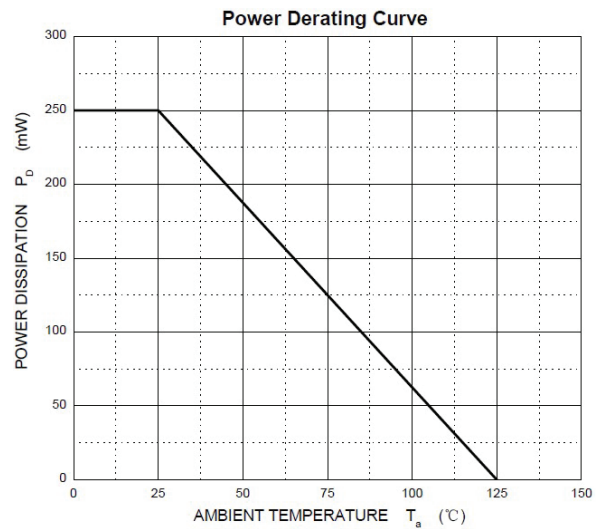
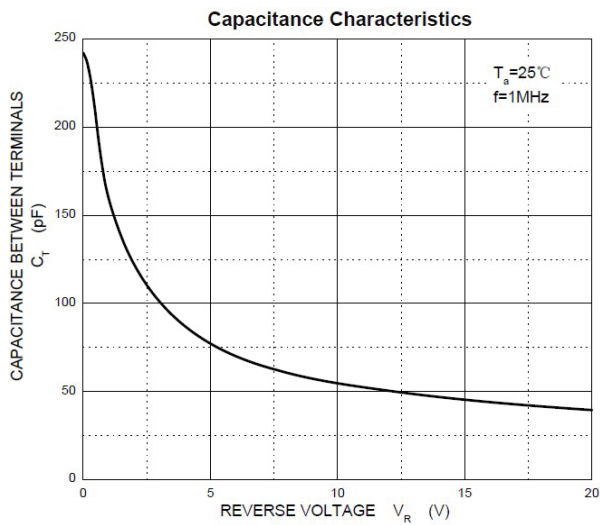
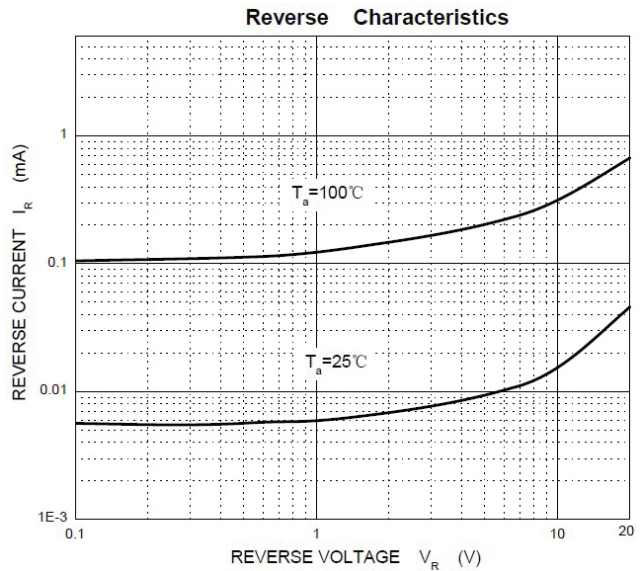
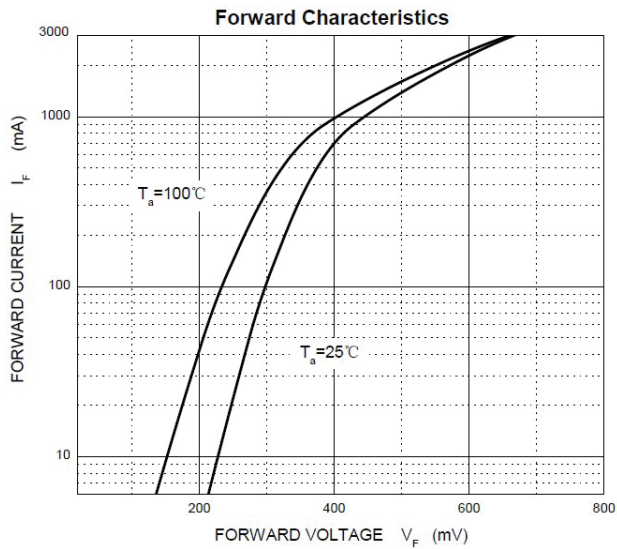
RATINGS	SYMBOL	1N5819WS	UNITS
Peak repetitive peak reverse voltage	V_{RRM}	40	V
Maximum RMS Volts	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Average rectified output current	I_O	1.0	A
Non-repetitive Peak Forward Surge Current@t=8.3ms	I_{FSM}	9	A
Repetitive peak forward current	I_{FRM}	1.5	A
Power dissipation	P_D	250	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	400.0	°C/W
Operating Storage Temperature Range	T_J	-40 ~ +125	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

CHARACTERISTICS	SYMBOL	1N5819WS	UNITS
Reverse breakdown voltage@ $I_R = 1mA$	$V_{(BR)}$	40	V
Forward voltage	@ $I_F = 1A$	0.6	V
	@ $I_F = 3A$	0.9	
Reverse voltage leakage current@ $V_R = 40V$	I_R	1.0	mA



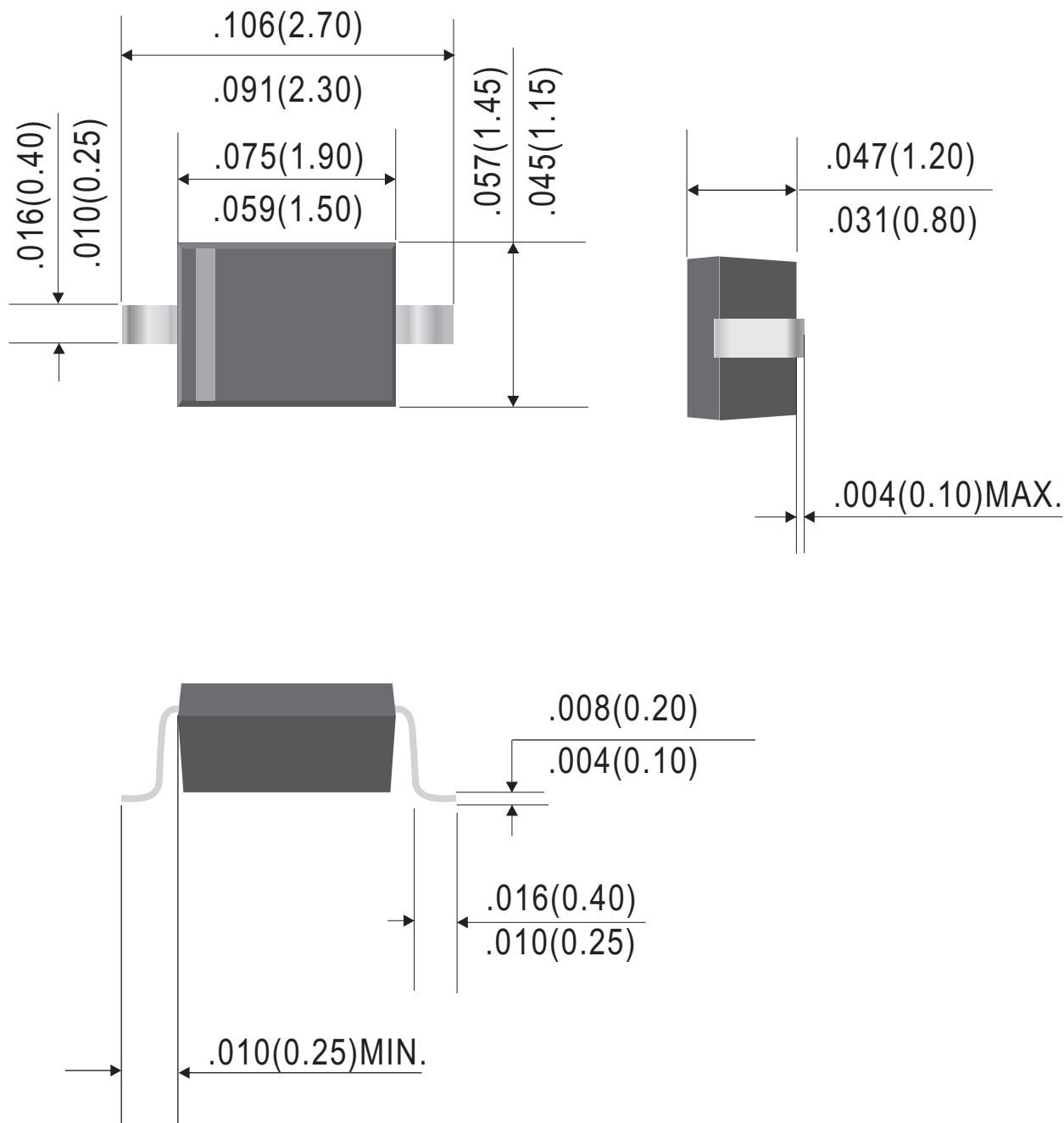
Typical Characteristics





Outline Drawing

SOD-323



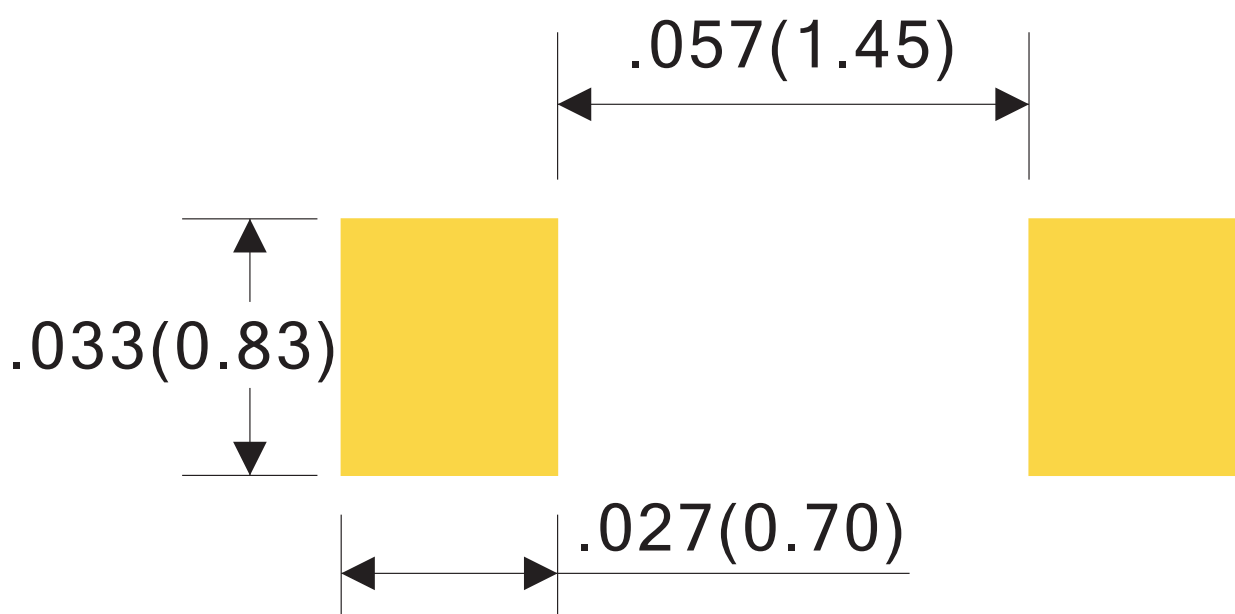
Dimensions in inches and (millimeters)

Rev.D



Suggested Soldering Pad Layout

SOD-323



Dimensions in inches and (millimeters)

RevA

**1A Plastic-Encapsulate Schottky Barrier Diode - 40V****Ordering Information:**

Device PN	Marking	Packing
1N5819WS-T ⁽¹⁾ H ⁽²⁾ -WS ⁽³⁾	SL ⁽⁴⁾	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code: Tape & Reel Packing ; Empty is Tube Packing.

(2) Packing code suffix "G" for RoHS product ; Packing code Suffix "H" for halogen free product
All materials and products supplied comply with the U.S. Toxic Substances Control Act statement, PBT Chemicals.

(3) Willas brand abbreviation, Label Type does not display.

(4) There may be additional marking, which relates to the lot trace code information (data code and vendor code), the logo or the environmental category on the device.

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