

Schottky Barrier Diode

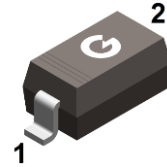
TB5817WH

FEATURES

- Extremely low V_F
- Low stored charge, majority carrier conduction
- Low power loss/high efficient
- MSL 1
- Halogen free
- Qualified to AEC-Q101 standards for high reliability

HF

1 CATHODE 2 ANODE



SOD-123

APPLICATIONS

- For use in low voltage, High frequency inverters
- Free Wheeling, And Polarity Protection Applications

ORDERING INFORMATION

Type No.	Marking	Package Code
TB5817WH	SJH	SOD-123

MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	symbol	Value	Unit
Non-Repetitive Peak reverse voltage	V_{RSM}	24	V
Peak repetitive Peak reverse voltage Working Peak Reverse voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_R	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	V
Average Rectified output Current	I_o	1	A
Peak forward surge current@=8.3ms	I_{FSM}	10	A
Power Dissipation	P_D	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250	$^\circ\text{C/W}$
Junction and Storage Temperature Range	T_J, T_{STG}	-65 to+150	$^\circ\text{C}$

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ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test Condition	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1\text{mA}$	20		V
Reverse voltage leakage current	I_R	$V_R=20\text{V}$		1	mA
Forward voltage	V_F	$I_F=1\text{A}$ $I_F=3\text{A}$		0.50 0.75	V
Diode capacitance	C_D	$V_R=4\text{V}, f=1\text{MHz}$		120	pF

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

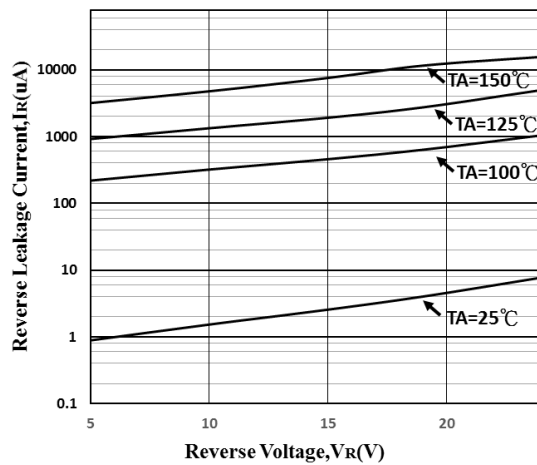


FIG 1. Typical Reverse Characteristic

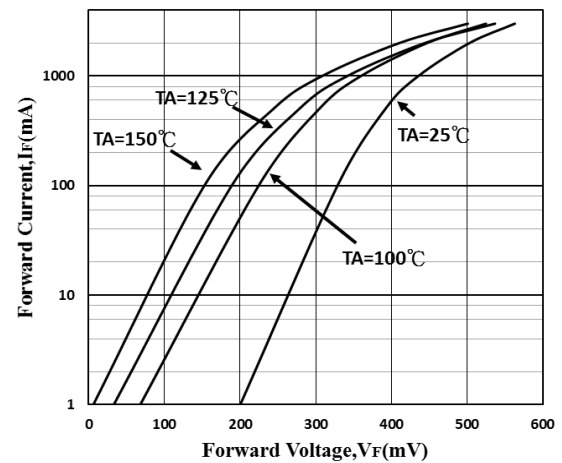


FIG 2. Typical Forward Characteristic

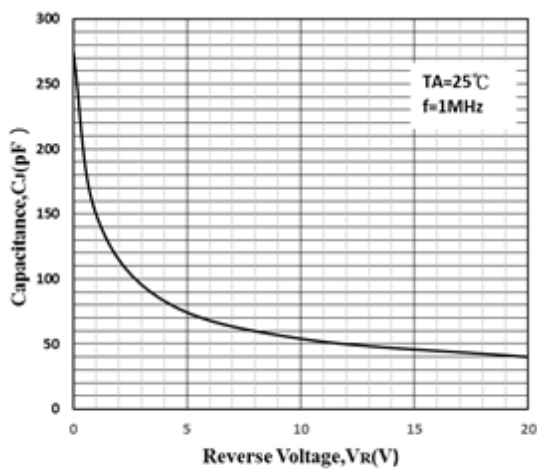


FIG 3. Capacitance vs Reverse Voltage

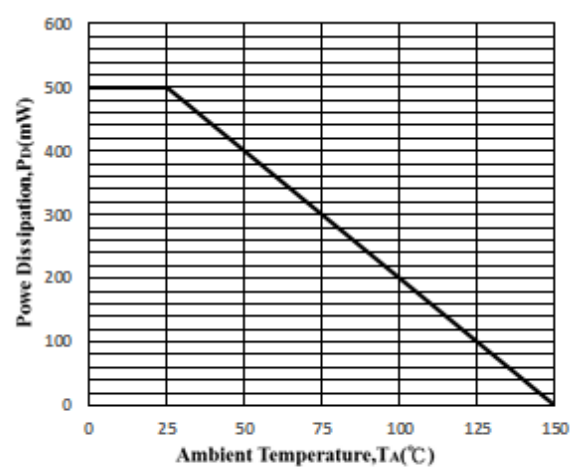


FIG 4. Power Derating Curve

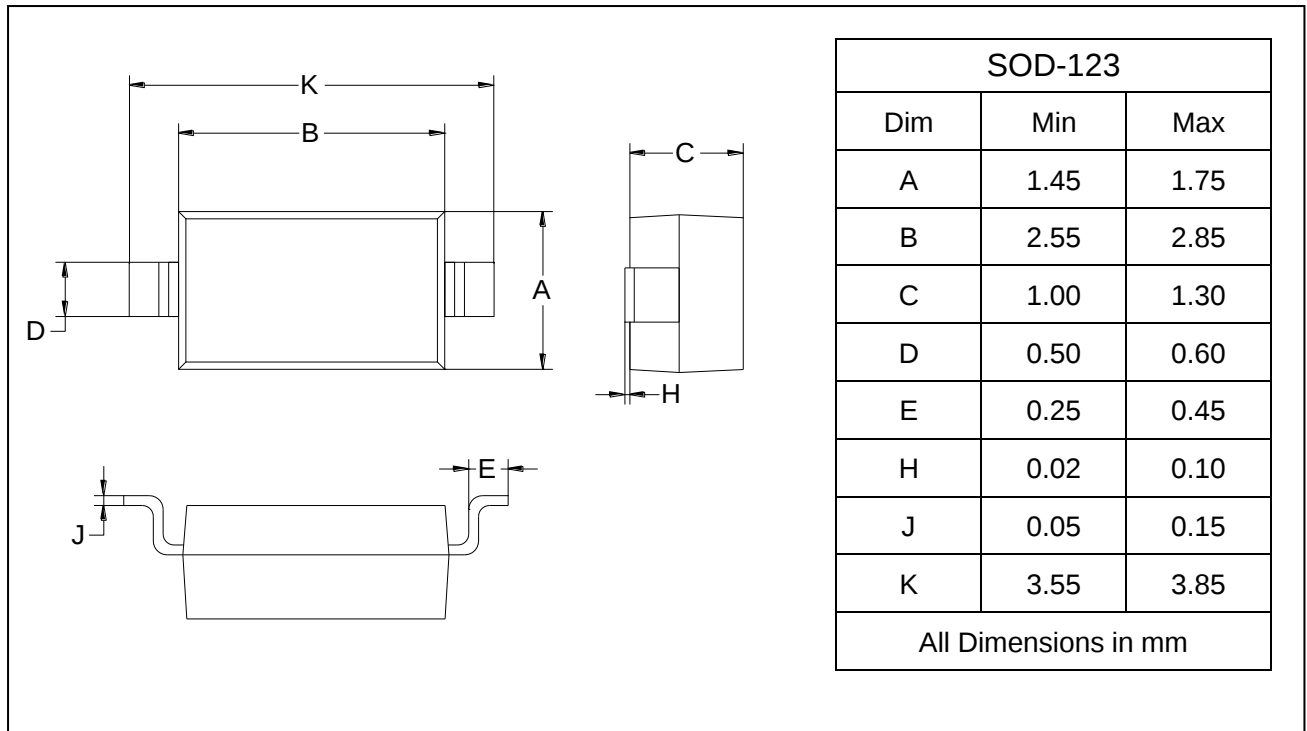
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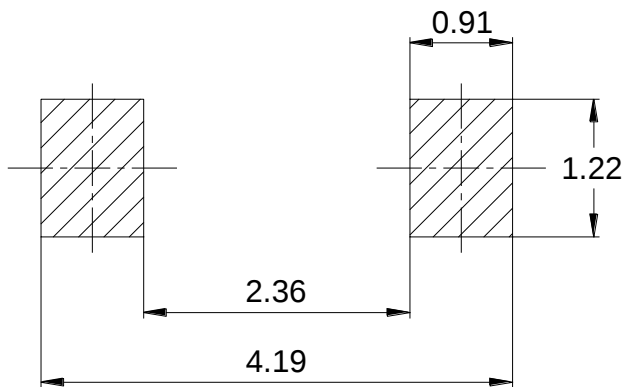
PACKAGE OUTLINE

Plastic surface mounted package

SOD-123



SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
TB5817WH	SOD-123	3000 pcs / Tape & Reel