KUU SEMICONDUCTOR

# KB5817WS THRU KB5819WS

SOD-323

FEATURES

For use in low voltage, high frequency inverters
Free wheeling, and polarity protection applications.

**MARKING:** KB5817WS: SJ
KB5818WS:SK
KB5819WS: SL
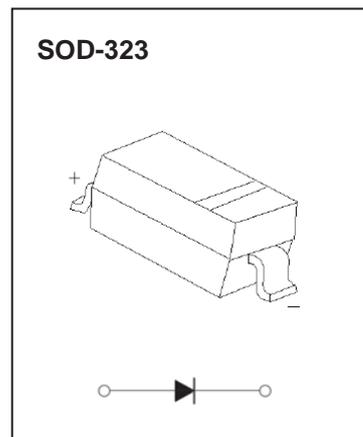
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25℃

Parameter	Symbol	KB5817WS	KB5818WS	KB5819WS	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	20	30	40	V
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Rectified Output Current	I_O	1			A
Peak Forward Surge Current @t=8.3ms	I_{FSM}	25			A
Repetitive Peak Forward Current	I_{FRM}	1.5			A
Power Dissipation	Pd	200			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625			℃/W
Storage Temperature	T_{STG}	-55~+150			℃

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R= 1mA	KB5817WS KB5818WS KB5819WS	20 30 40		V
Reverse voltage leakage current	I_R	V_R=20V V_R=30V V_R=40V	KB5817WS KB5818WS KB5819WS		1	mA
Forward voltage	V_F	KB5817WS	I_F=1A		0.45	V
			I_F=3A		0.75	
		KB5818WS	I_F=1A		0.55	V
			I_F=3A		0.875	
		KB5819WS	I_F=1A		0.6	V
			I_F=3A		0.9	
Diode capacitance	C_D	V_R=4V, f=1MHz			120	pF

Typical Characteristics

Forward   Characteristics

FORWARD CURRENT I_F (A)

FORWARD VOLTAGE V_F (V)

$T_a=100℃$

$T_a=25℃$

Reverse   Characteristics

REVERSE CURRENT I_R (mA)

REVERSE VOLTAGE V_R (V)

$T_a=100℃$

$T_a=25℃$

Capacitance Characteristics

CAPACITANCE BETWEEN TERMINALS C_T (pF)

REVERSE VOLTAGE V_R (V)

$T_a=25℃$
f=1MHz

Power Derating Curve

POWER DISSIPATION P_D (mW)

AMBIENT TEMPERATURE T_a (℃)

KUU SEMICONDUCTOR
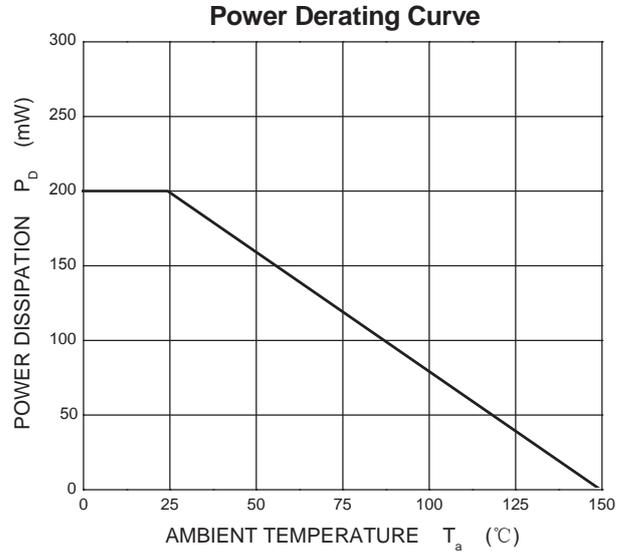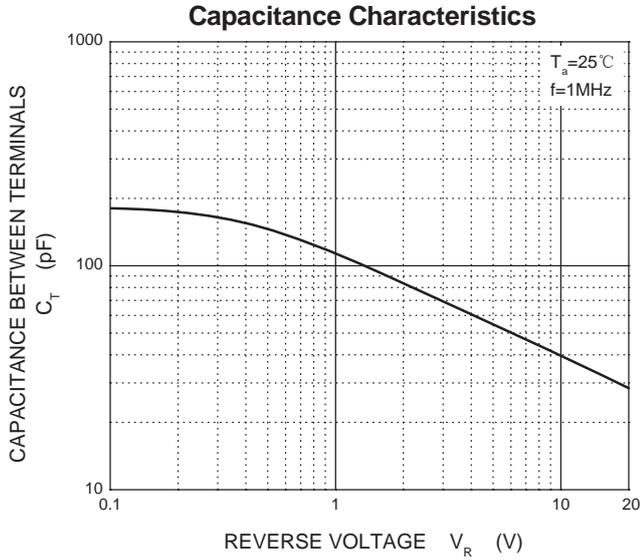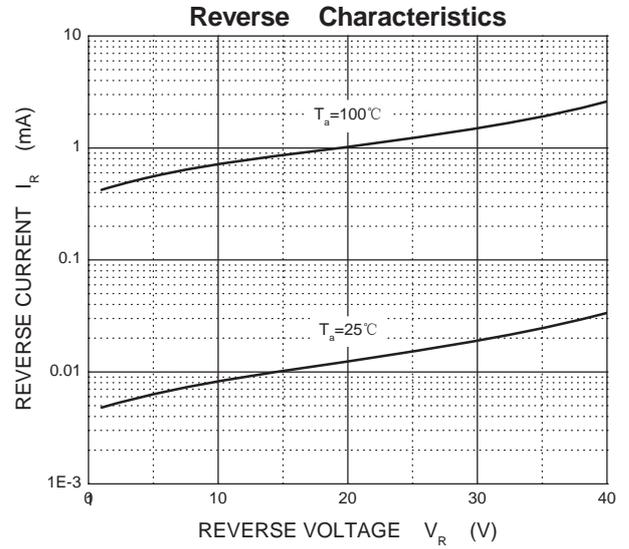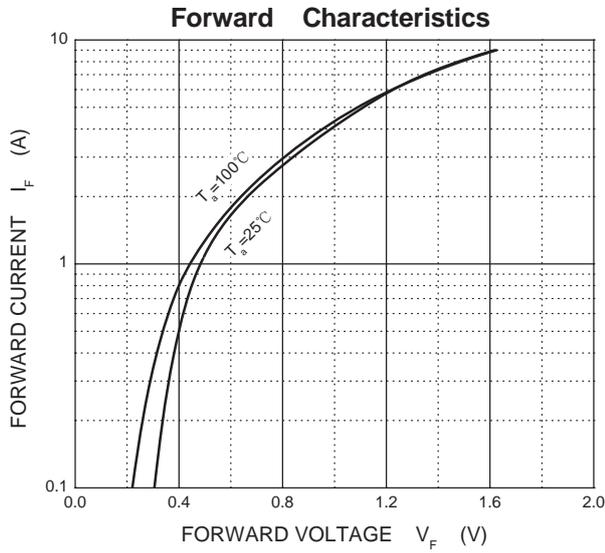
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads   **SOD-323**
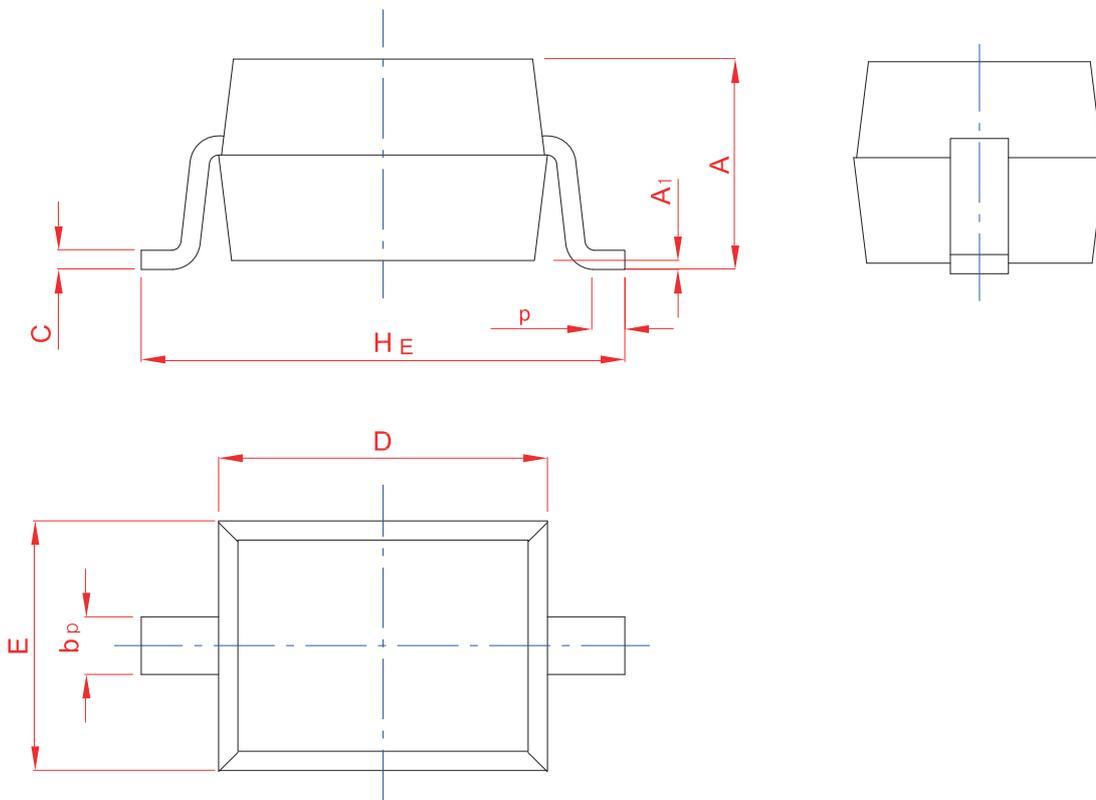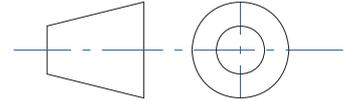
UNIT	A	b$_p$	C	D	E	H$_E$	A$_1$	L$_p$
mm	1.20	0.40	0.15	1.80	1.35	2.80	0.10	0.50
	0.90	0.25	0.10	1.60	1.15	2.30	0.01	0.20

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Schottky Diodes & Rectifiers *category:*

Click to view products by Yongyutai Electronics *manufacturer:*

Other Similar products are found below :

MA4E2039 MA4E2508M-1112 MBR10100CT-BP MBR1545CT MMBD301M3T5G RB160M-50TR BAS16E6433HTMA1 BAS 3010S-02LRH E6327 BAT 54-02LRH E6327 IDL02G65C5XUMA1 NSR05F40QNXT5G NSVR05F40NXT5G NTE555 JANS1N6640 SB07-03C-TB-H SK310-T SK33A-TP SK34B-TP SS3003CH-TL-E PDS3100Q-7 GA01SHT18 CRS10I30A(TE85L,QM MA4E2501L-1290 MBRB30H30CT-1G JANTX1N5712-1 SB007-03C-TB-E SK33B-TP SK35A-TP SK38B-LTP NTE505 NTSB30U100CT-1G VS-6CWQ10FNHM3 CRG04(T5L,TEMQ) ACDBA1100LR-HF ACDBA1200-HF ACDBA240-HF ACDBA3100-HF CDBQC0530L-HF ACDBA260LR-HF ACDBA1100-HF MA4E2502L-1246 10BQ015-M3/5BT 10BQ060-M3/5BT NRVB130LSFT1G CRS08TE85LQM PMAD1108-LF B120Q-13-F 1N5819T-G B0530WSQ-7-F PDS1040Q-13