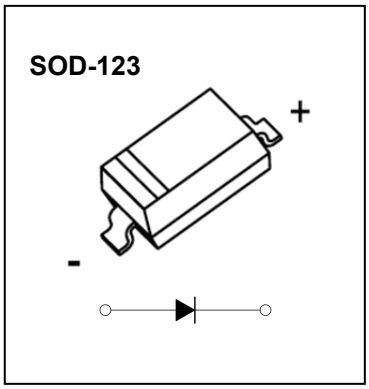
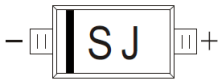
FEATURES

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

SOD-123 Plastic-Encapsulate Diodes



MARKING:

TKB5817W :SJ	TKB5818W :SK	TKB5819W :SL
		

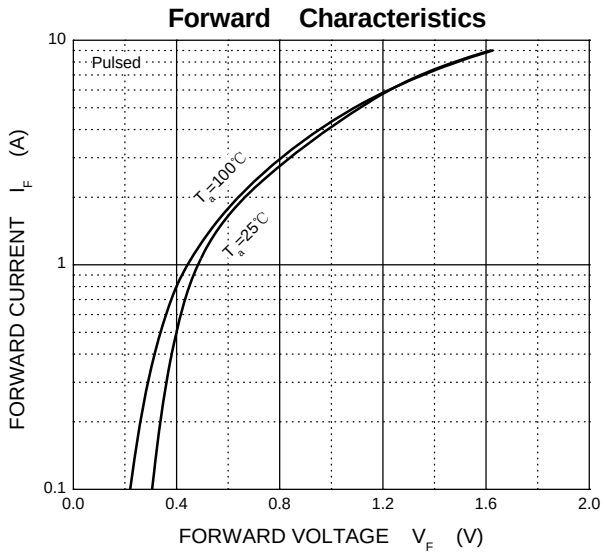
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25℃

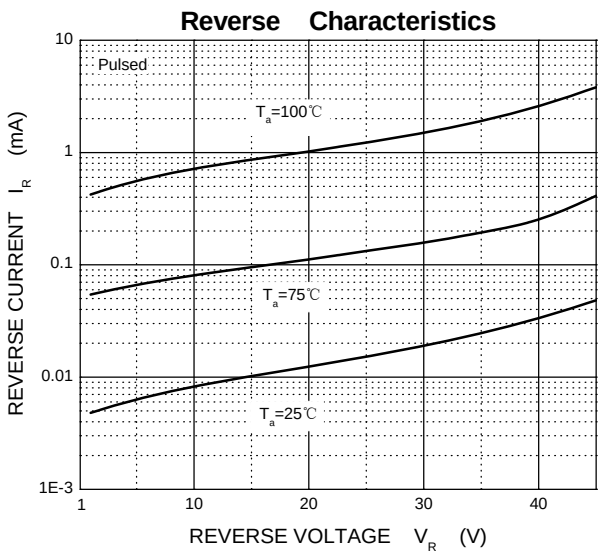
Parameter	Symbol	TKB5817W	TKB5818W	TKB5819W	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	20	30	40	V
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Rectified Output Current	I_O	1			A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	9			A
Repetitive Peak Forward Current	I_{FRM}	1.5			A
Power Dissipation	Pd	500			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200			℃/W
Junction temperature	T_J	125			℃
Storage Temperature	T_{STG}	-55~+150			℃

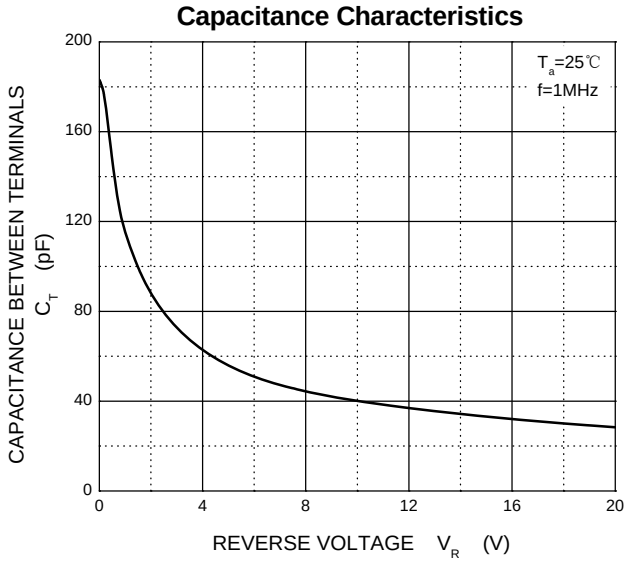
ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

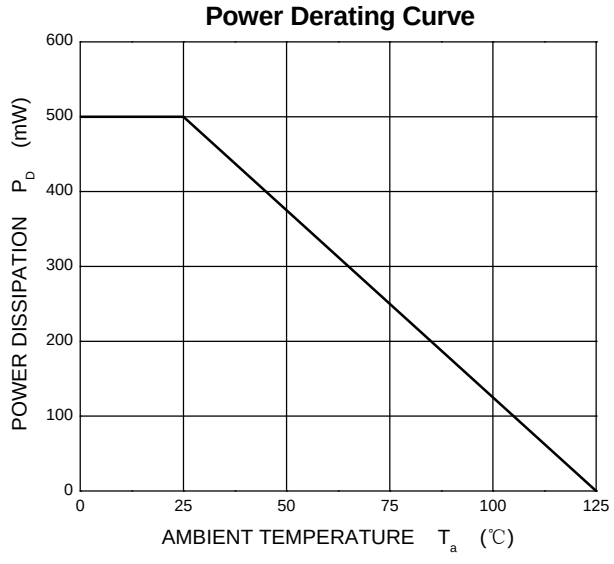
Parameter	Symbol	Test conditions		Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R= 1mA	TKB5817W TKB5818W TKB5819W	20 30 40		V
Reverse voltage leakage current	I_R	V_R=20V V_R=30V V_R=40V	TKB5817W TKB5818W TKB5819W		1	mA
Forward voltage	V_F	TKB5817W	I_F=1A I_F=3A		0.45 0.75	V
		TKB5818W	I_F=1A I_F=3A		0.55 0.875	V
		TKB5819W	I_F=1A I_F=3A		0.6 0.9	V
Diode capacitance	C_D	V_R=4V, f=1MHz			120	pF

Typical Characteristics

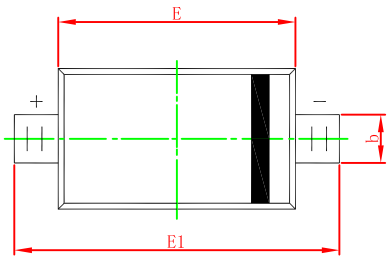


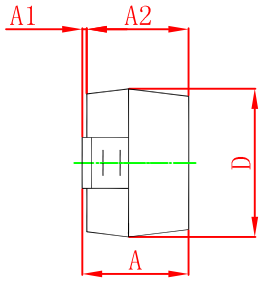


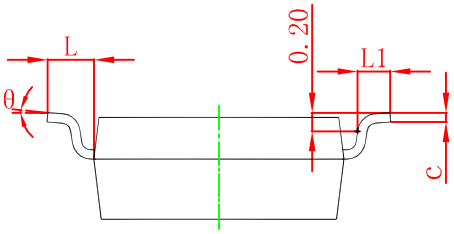




SOD-123 Package Outline Dimensions

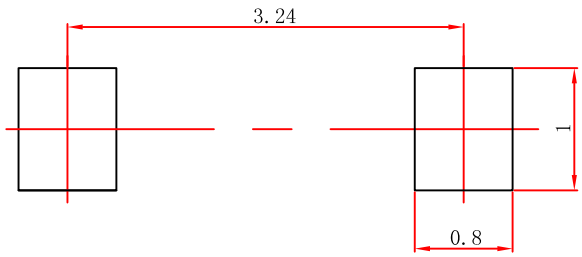






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

SOD-123 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.