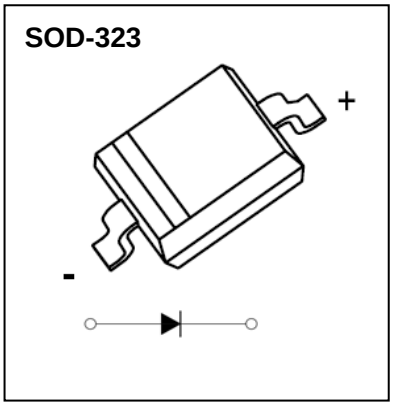
TKB1040WS

SCHOTTKY BARRIER DIODE

SOD-323 Plastic-Encapsulate Diodes

FEATURES

- Low Forward Voltage Drop
- Very Small SMD Package



APPLICATIONS

- Low Voltage Rectification
- High Efficiency DC/DC Conversion
- Switch Mode Power Supply
- Inverse Polarity Protection
- Low Power Consumption Applications

MARKING: SZ

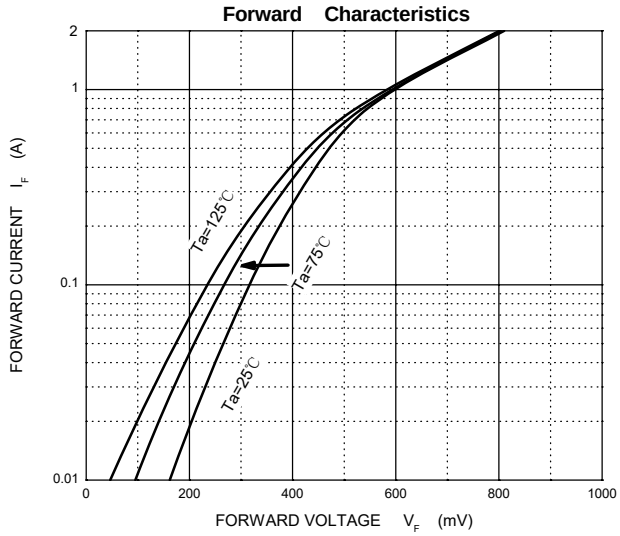
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

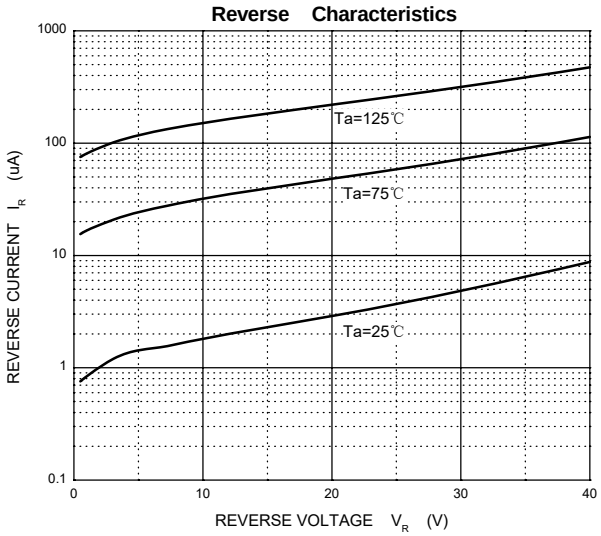
Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	40	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I_O	Average Rectified Output Current	1	A
I_{FSM}	Non-repetitive Peak Forward Surge Current @ t=8.3ms	5	A
P_D	Power Dissipation	250	mW
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	400	℃/W
T_j	Operation Junction Temperature Range	-40 ~ +125	℃
T_{stg}	Storage Temperature Range	-55 ~ +150	℃

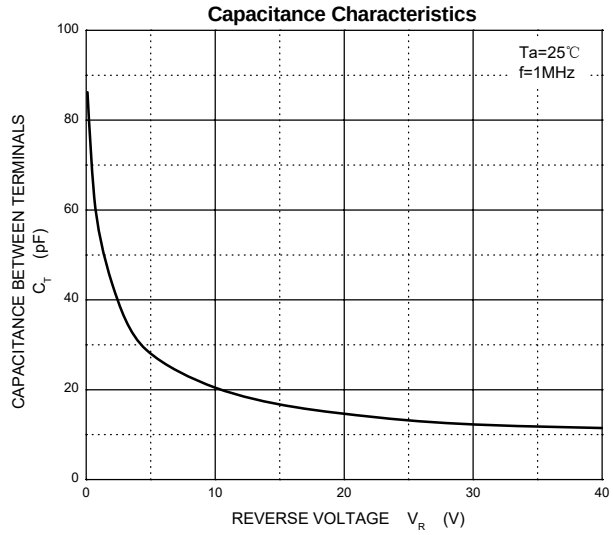
ELECTRICAL CHARACTERISTICS(T_a=25℃ unless otherwise specified)

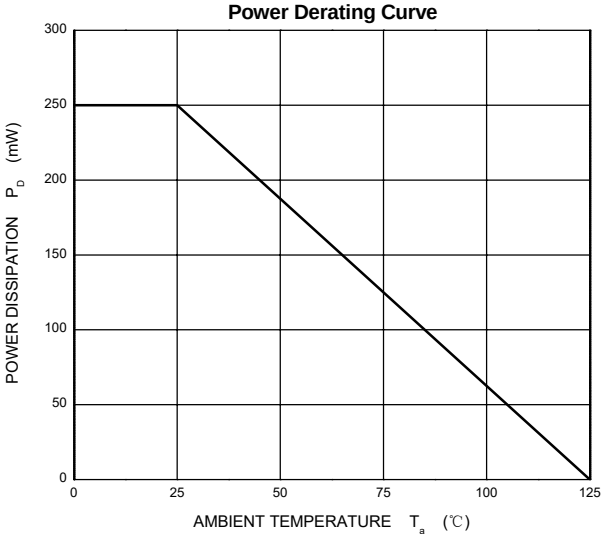
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R=1mA	40			V
Reverse current	I_R	V_R=20V			50	uA
Forward voltage	V_F	I_F=0.5A			0.51	V
		I_F=0.7A			0.55	
Total capacitance	C_{tot}	V_R=10V,f=1MHz			20	pF

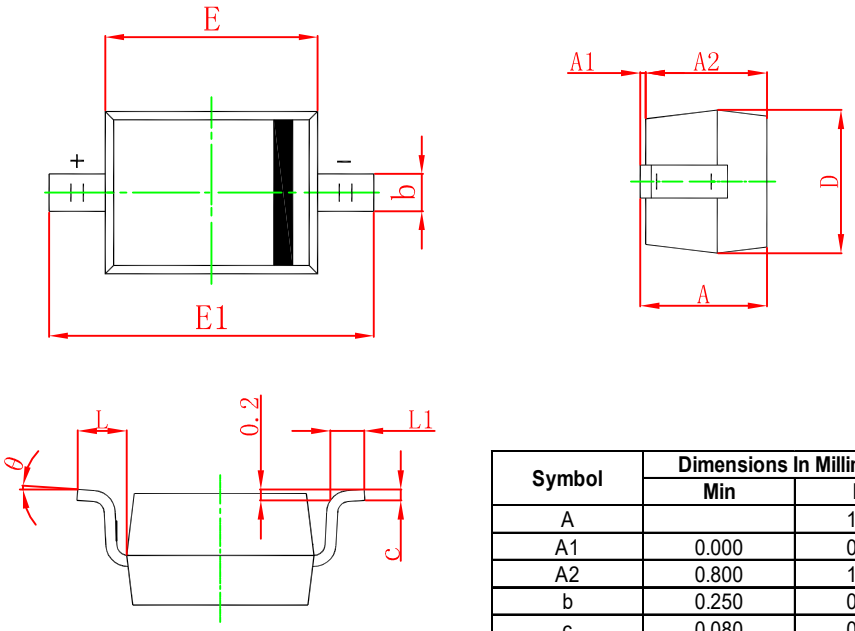
Typical Characteristics





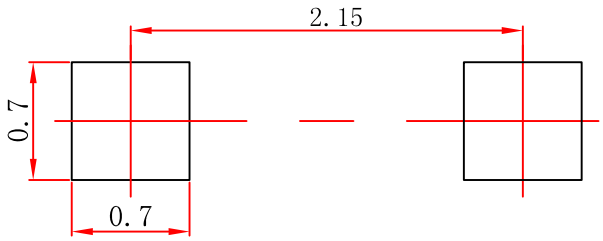






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

SOD-323 Suggested Pad Layout



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