

Features

- * Low forward voltage drop
- * Low reverse current
- * RoHS Compliant
- * REACH & SVHC Compliant
- * Halogen Compliant
- * SOD-523 Package



SOD-523

Ordering Information

Part Number	Packaging	Reel Size
RB160SS-40	3000/Tape & Reel	7 inch

Circuit Diagram



Marking Diagram :



Top view

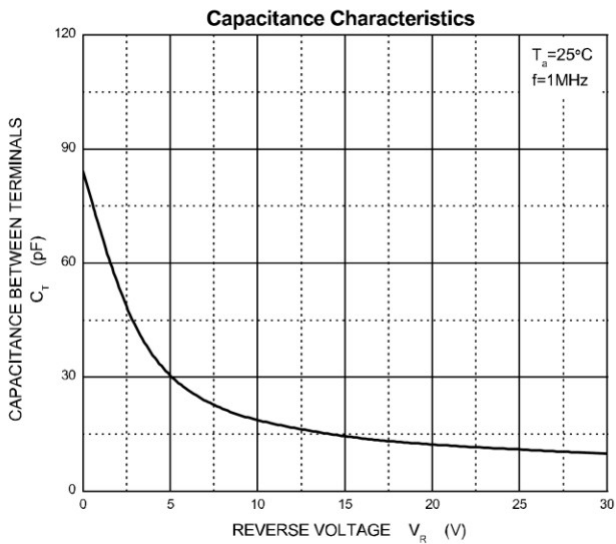
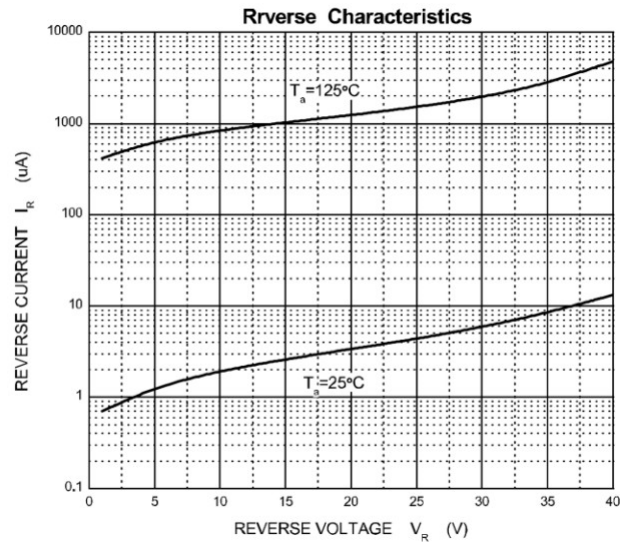
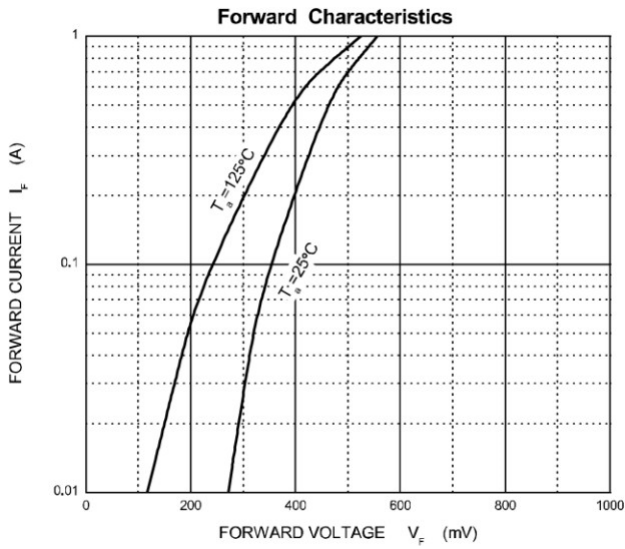
Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V _{RRM}	40	V
DC blocking voltage	V _R	40	V
Continuous forward current	I _O	1	A
Non-repetitive peak forward current @ t=8.3ms	I _{FSM}	7	A
Power dissipation	P _D	500	mW
Junction temperature	T _J	-40 to +125	°C
Storage temperature	T _{STG}	-55 to +150	°C

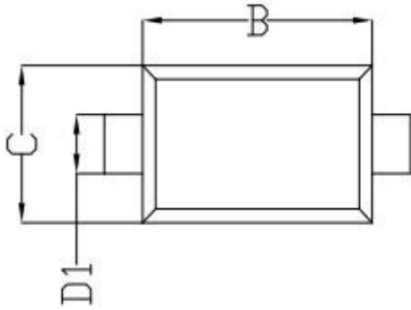
Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Breakdown voltage	V _{BR}	I _T = 1mA	40			V
Reverse leakage current	I _R	V _R = 40V		10	40	μA
Forward voltage	V _F	I _F = 0.1A			420	mV
Forward voltage	V _F	I _F = 0.2A			450	mV
Forward voltage	V _F	I _F = 1A			610	mV
Diode capacitance	C _D	V _R = 10V, f = 1MHz		19		pF

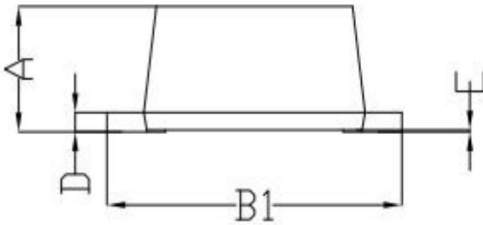
Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)



SOD-523 Package Outline Drawing



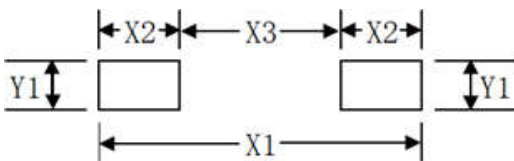
TOP VIEW



SIDE VIEW

SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	Min	Typ	Max	Min	Typ	Max
A	0.60	0.65	0.70	0.0236	0.0256	0.0276
B	1.15	1.20	1.25	0.0453	0.0472	0.0492
B1	1.55	1.60	1.65	0.0610	0.0630	0.0650
C	0.75	0.80	0.85	0.0295	0.0315	0.0335
D	0.10	0.11	0.12	0.0039	0.0043	0.0047
D1	0.28	0.30	0.32	0.0110	0.0118	0.0126
E	0.00	-	0.02	0.0000	-	0.0008

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETER	INCHES
X1	2.00	0.079
X2	0.60	0.024
X3	0.80	0.031
Y1	0.50	0.020