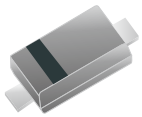
RB520S-30

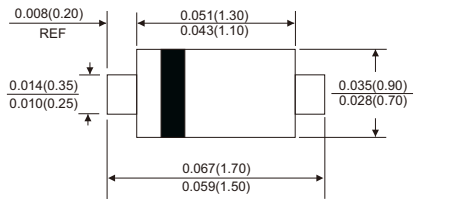
Io = 200 mA
V_R = 30 Volts
RoHS Device



Features

-Low reverse current.
-Designed for mounting on small surface.
-Extremely thin package.
-Majority carrier conduction.

SOD-523



Dimensions in inches and (millimeter)

Mechanical data

-Case: SOD-523 standard package, molded plastic.
-Terminals: Solderable per MIL-STD-750, method 2026.
-Polarity: Color band denotes cathode end.
-Mounting position: Any
-Weight: 0.0012 grams(approx.).

Circuit Diagram



Maximum Ratings (at T_A=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
DC reverse voltage		V_R			30	V
Mean rectifying current		Io			200	mA
Peak forward surge current	8.3ms single half sine-wave superimposed on rate load(JEDEC method)	I_{FSM}			1	A
Storage temperature		T_{STG}	-40		+125	°C
Junction temperature		T_j			+125	°C

Electrical Characteristics (At Ta=25°C, unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F = 200 mA	V_F			0.6	V
Reverse current	V_R = 10 V	I_R			1	μA

RATING AND CHARACTERISTIC CURVES (RB520S-30)

Fig.1 - Forward Characteristics

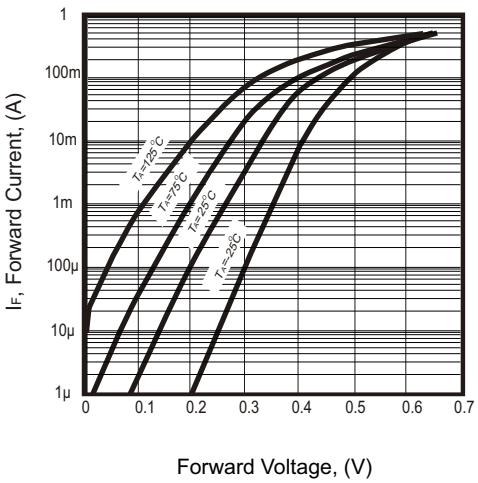


Fig. 2 - Reverse characteristics

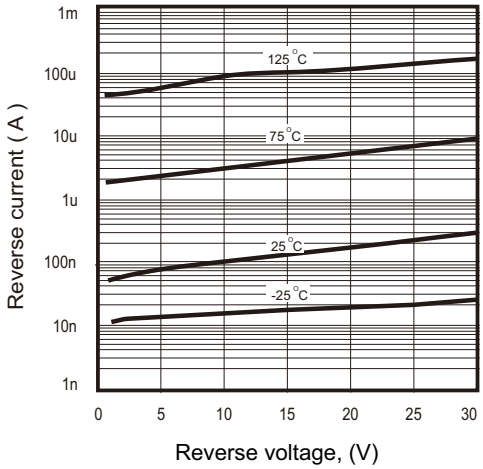


Fig. 3 - Capacitance between terminals characteristics

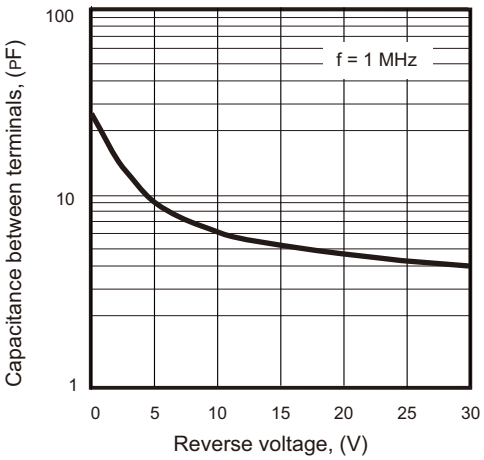
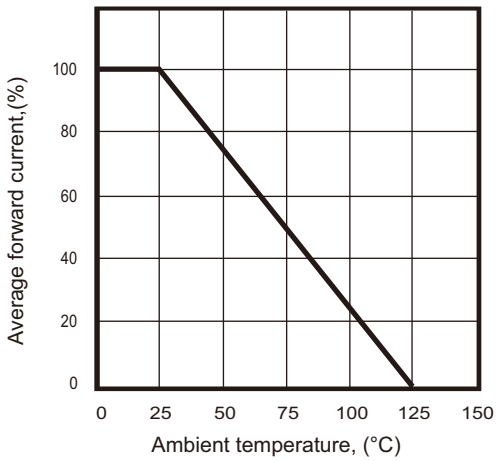
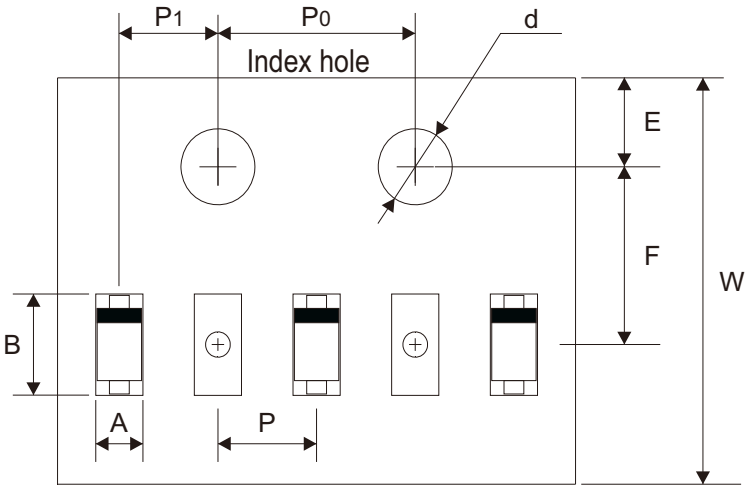
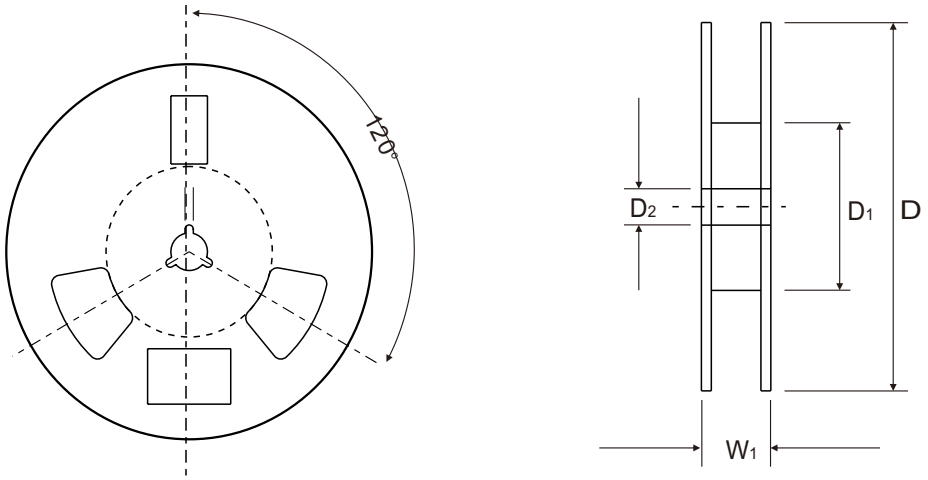


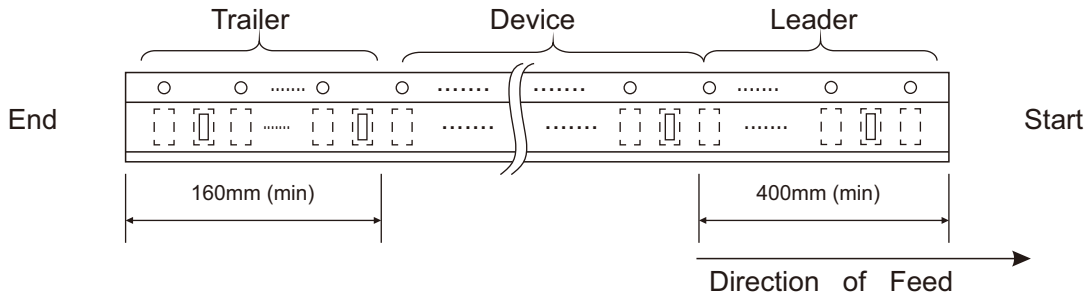
Fig.4 - Derating curve
(Mounting on glass epoxy PCBs)



Reel Taping Specification







	SYMBOL	A	B	C	d	D	D1	D2
SOD-523	(mm)	0.90 ± 0.10	1.94 ± 0.10	0.73 ± 0.10	1.50 + 0.10	178 ± 1.00	54.40 ± 0.40	13.00 ± 0.20
	(inch)	0.035 ± 0.004	0.076 ± 0.004	0.029 ± 0.004	0.059 + 0.004	7.008 ± 0.039	2.142 ± 0.016	0.512 ± 0.008

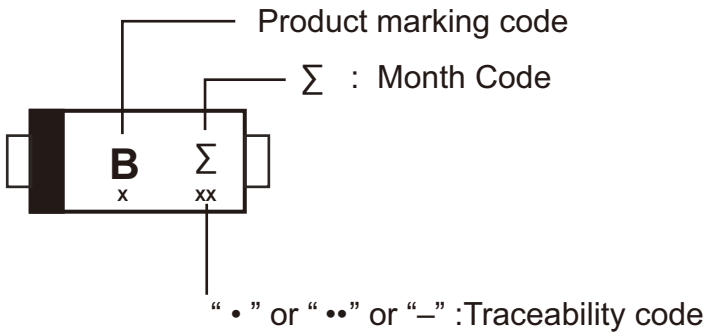
	SYMBOL	E	F	P	P0	P1	W	W1
SOD-523	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 + 0.30 / - 0.10	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.004	0.158 ± 0.004	0.079 ± 0.004	0.315 + 0.012 / - 0.004	0.374 ± 0.039

Marking Code

Part Number	Marking Code	
RB520S-30	B	B ∑

Month Code:

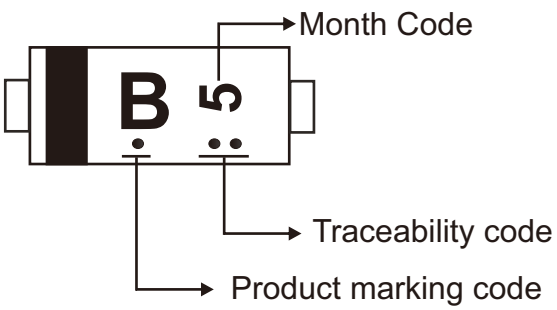
Month	Odd Year (per A.D.)	Even Year (per A.D.)
Jan	1	E
Feb	2	F
Mar	3	H
Apr	4	J
May	5	K
Jun	6	L
Jul	7	N
Aug	8	P
Sep	9	U
Oct	T	X
Nov	V	Y
Dec	C	Z



For example as follows:

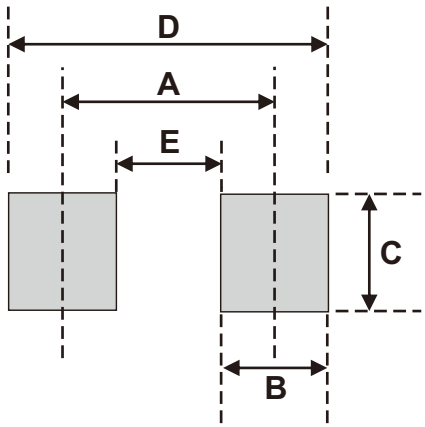
- Product marking code: B
- Manufacture date_ Year: 2013 (Even year) / Month: May

  Month code: J (Month code rotated 90° and two dots below the month code.)



Suggested PAD Layout

SIZE	SOD-523	
	(mm)	(inch)
A	1.40	0.055
B	0.60	0.024
C	0.70	0.028
D	2.00	0.079
E	0.80	0.031



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-523	3,000	7