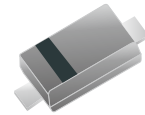


RB520S-30-HF

 $I_o = 200 \text{ mA}$
 $V_R = 30 \text{ Volts}$

RoHS Device

Halogen Free

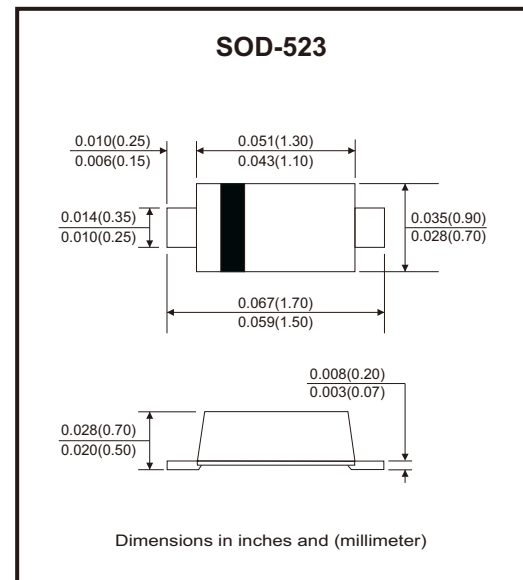


Features

- Extremely fast switching speed.
- Extremely low forward voltage 0.6V (max)
@ $I_F=200\text{mA}$.
- Low reverse current.

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 $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Limit	Unit
DC reverse voltage		V_R	30	V
Mean rectifying current		I_o	200	mA
Peak forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	1	A
Junction temperature		T_j	125	$^\circ\text{C}$
Storage temperature range		T_{STG}	-40 to +125	$^\circ\text{C}$

Electrical Characteristics (at $T_j=25^\circ\text{C}$ unless otherwise noted)

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

Rating and Characteristic Curves (RB520S-30-HF)

Fig.1 - Forward Characteristics

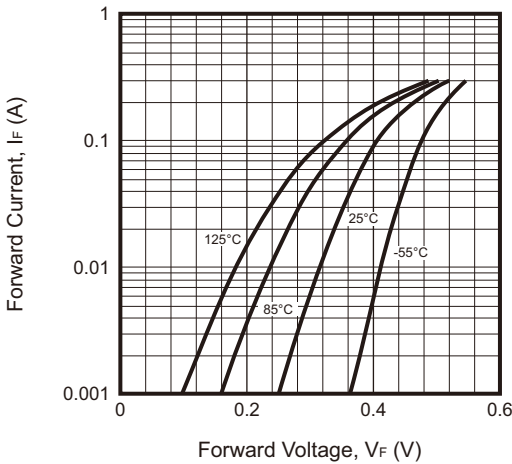


Fig.2 - Reverse Characteristics

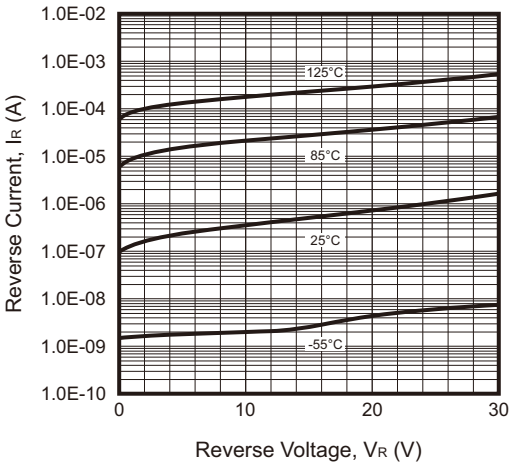
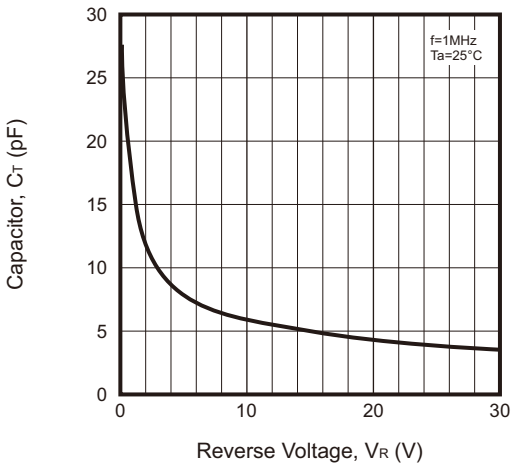
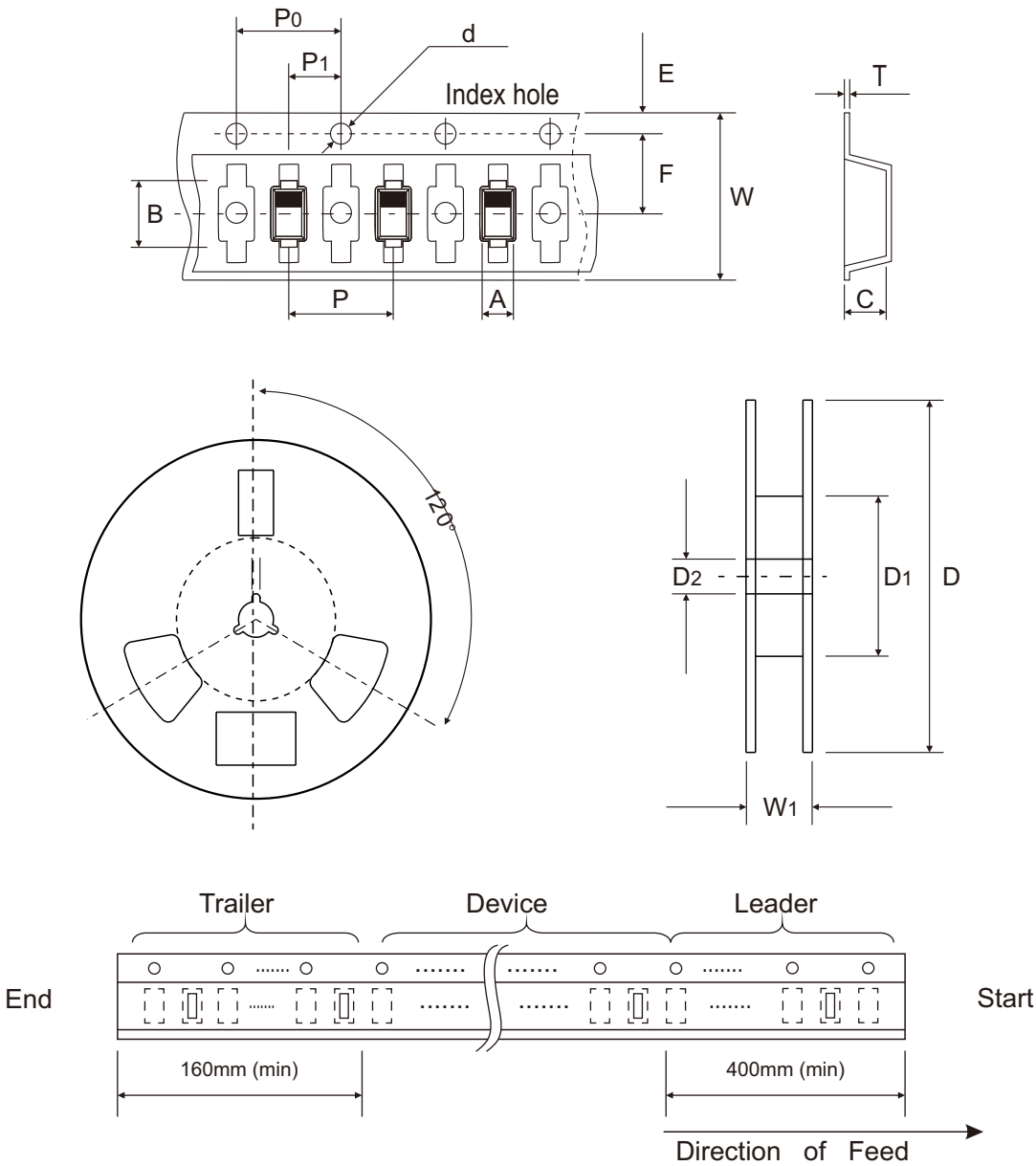


Fig.3 - Capacitance Between
Terminals Characteristics



Reel Taping Specification



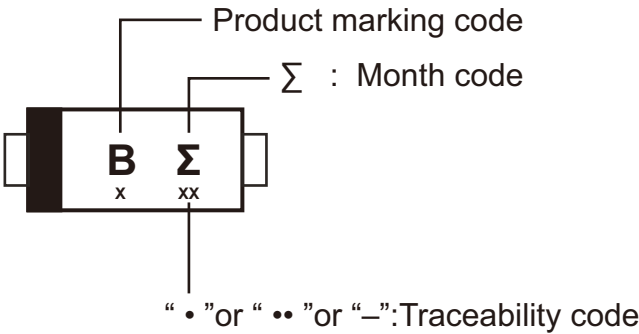
SOD-523	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	See Note 1			1.50 + 0.10 - 0.00	178.00 Max.	50 Min.	13.00 ± 0.50
	(inch)				0.059 + 0.004 - 0.000	7.008 Max.	1.969 Min.	0.512 ± 0.020

SOD-523	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.60 Max.	8.30 Max.	10.9 Max.
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.024 Max.	0.327 Max.	0.429 Max.

Notes: 1. A, B, and C are determined by component size. The clearance between the components and the cavity must be within 0.05mm min. to 0.50mm max.

Marking Code

Part Number	Marking Code	
RB520S-30-HF	B Σ	B



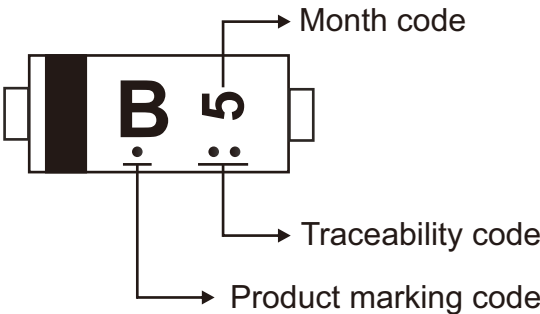
Month Code:

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

Month	Odd Year (per A. D.)	Even Year (per A. D.)
Jul	7	N
Aug	8	P
Sep	9	U
Oct	T	X
Nov	V	Y
Dec	C	Z

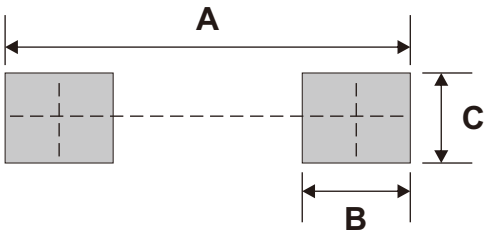
For example as follows:

- 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	1.80	0.071
B	0.48	0.019
C	0.40	0.016



Standard Packaging

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