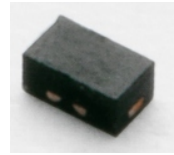


RB521BS-30

 $I_o=100\text{mA}$
 $V_R=30\text{V}$

RoHS Device



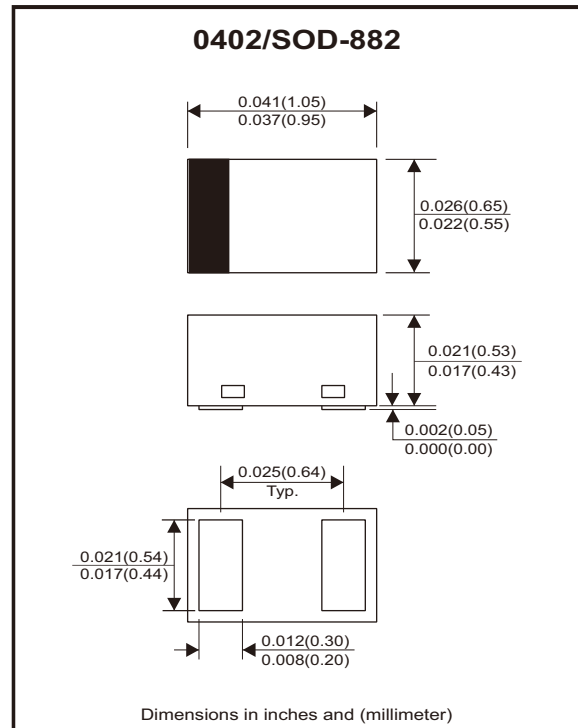
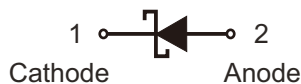
Features

- Small surface mounting type.
- Low profile package.
- Low V_F
- High reliability.

Mechanical Data

- Case: Molded plastic 0402/SOD-882
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any.

Circuit Diagram



Maximum Ratings (at $T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	30	V
Average rectified forward current	I_o	100	mA
Peak forward surge current (60Hz for 1 cycle)	I_{FSM}	500	mA
Operation junction temperature range	T_J	125	$^\circ\text{C}$
Storage temperature range	T_{stg}	-40 to +125	$^\circ\text{C}$

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

Parameter	Conditions	Symbol	Min.	Max.	Unit
Forward voltage	$I_F=10\text{mA}$ $I_F=20\text{mA}$	V_F	-	0.35 0.40	V
Reverse current	$V_R=10\text{V}$	I_R	-	10	μA

ELECTRICAL CHARACTERISTIC CURVES (RB521BS-30)

Fig.1 - Forward Characteristics

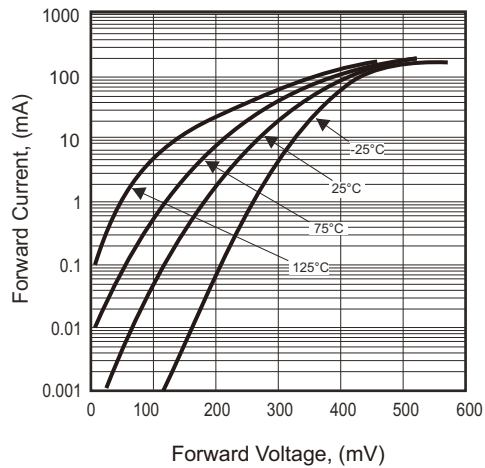


Fig.2 - Reverse Characteristics

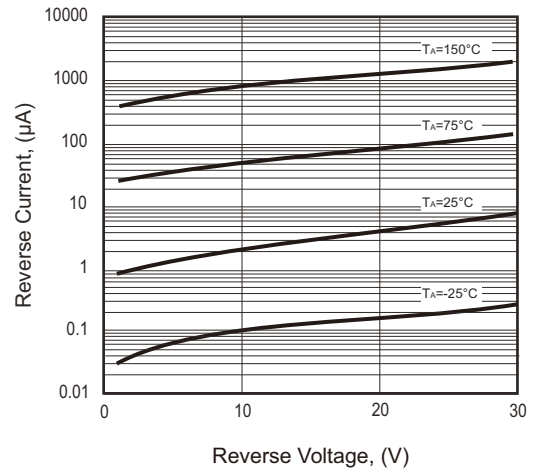


Fig.3 - Capacitance Between Terminals

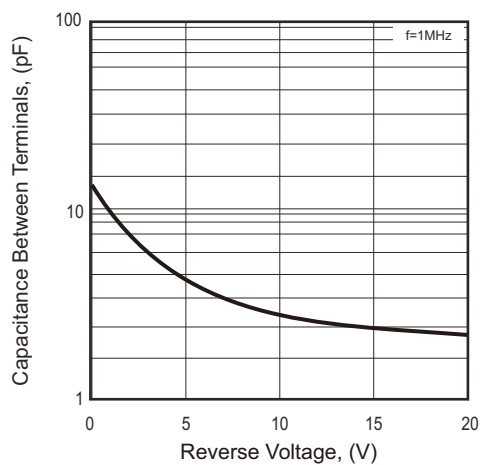


Fig.4 - Derating Curve, (I_o - T_c)

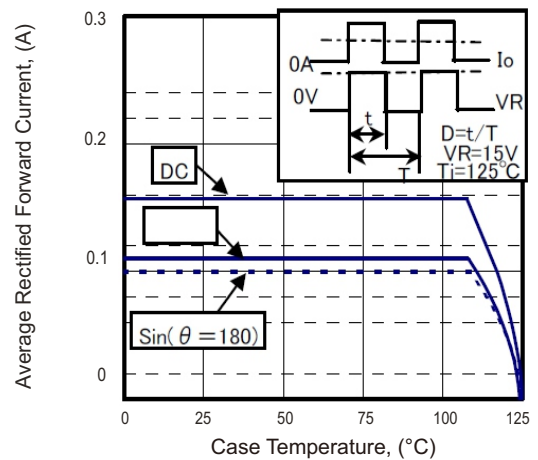
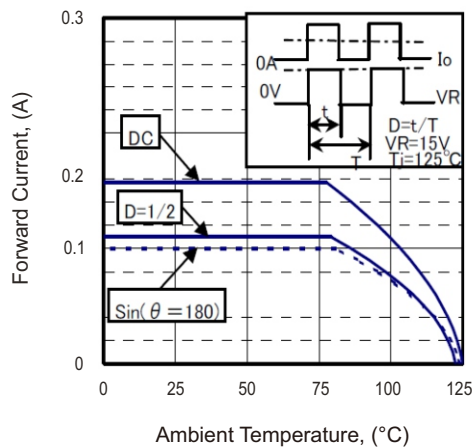
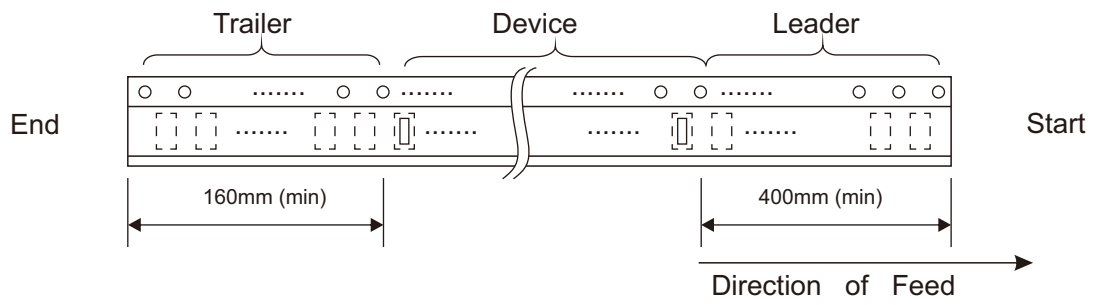
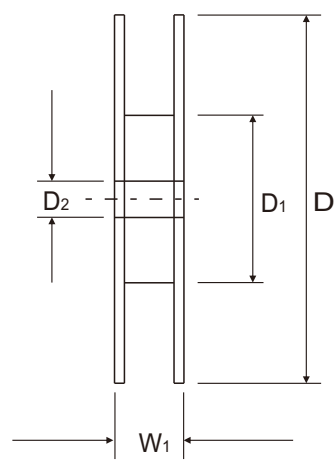
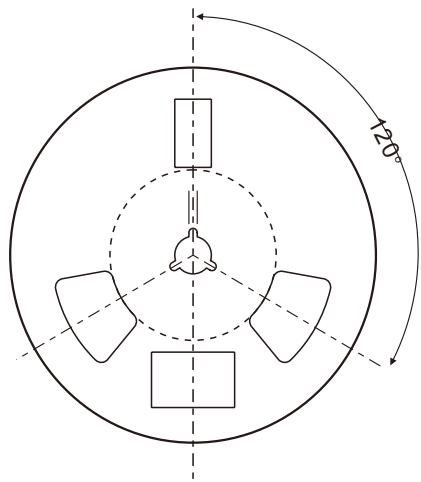
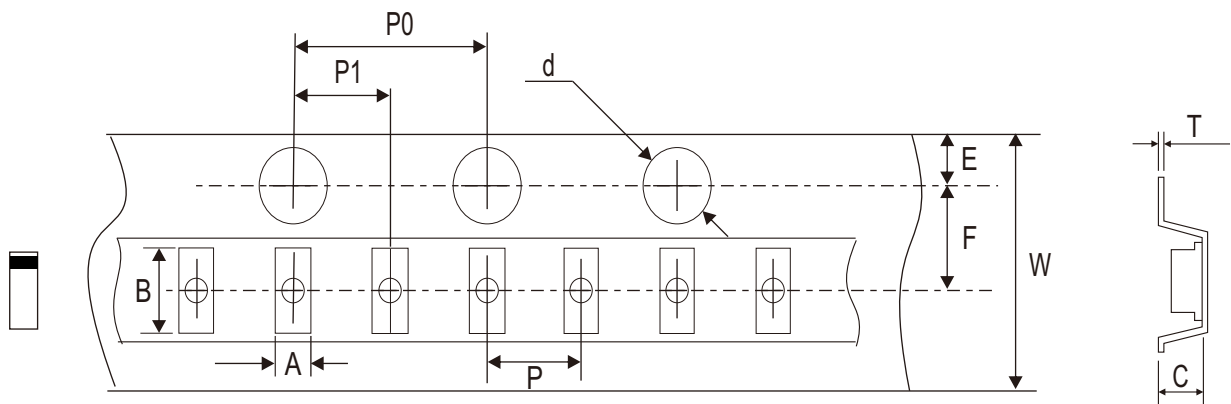


Fig.5 - Derating Curve, (I_o - T_a)



Reel Taping Specification



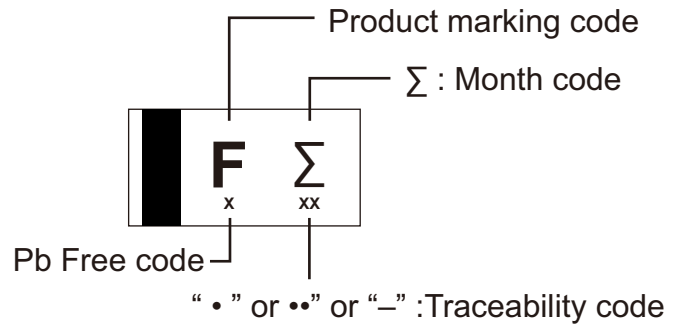
0402 (SOD-882)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	See Note 1			1.50 + 0.10 - 0.00	178.00 Max.	50 Min.	13.00 ± 0.50
	(inch)				0.059 + 0.004 - 0.000	7.008 Max.	1.969 Min.	0.512 ± 0.020

0402 (SOD-882)	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 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	0.079 ± 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
RB521BS-30	F



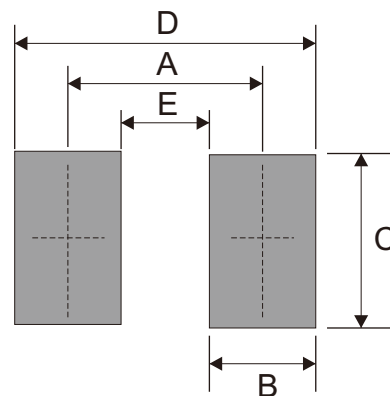
Month Code:

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

Suggested PAD Layout

SIZE	0402/SOD-882	
	(mm)	(inch)
A	0.700	0.028
B	0.400	0.016
C	0.700	0.028
D	1.100	0.043
E	0.300	0.012



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
0402/SOD-882	10,000	7