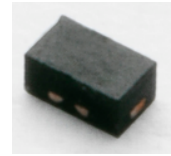


## RB521BS-30

$I_o=100\text{mA}$

$V_R=30\text{V}$

RoHS Device



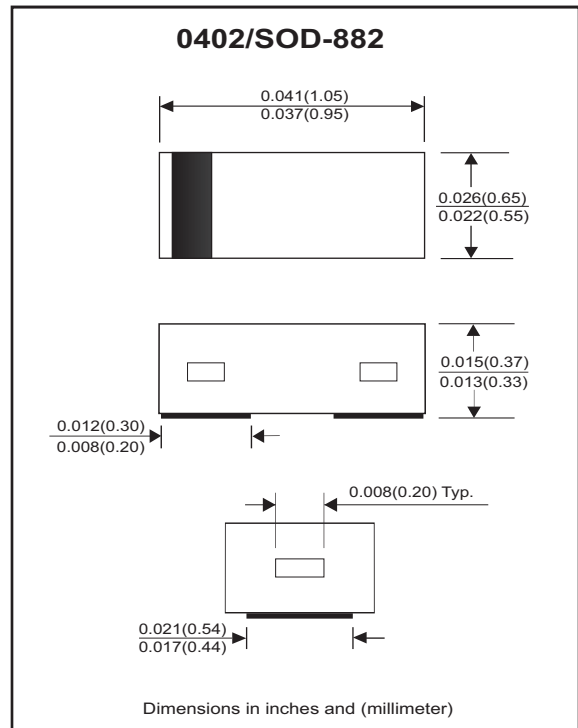
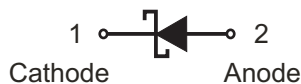
### Features

- 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, 1cycle)	$I_{FSM}$	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	$\mu\text{A}$

## ELECTRICAL CHARACTERISTIC CURVES (RB521BS-30)

Fig.1- Forward Characteristics

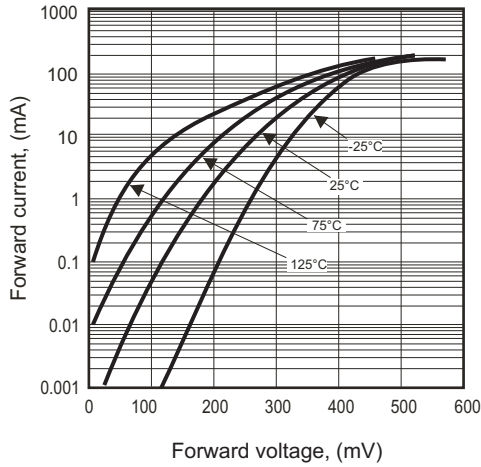


Fig.2- Reverse Characteristics

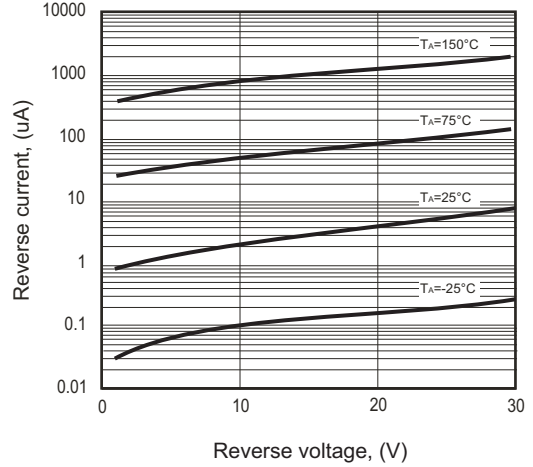


Fig.3- Capacitance between terminals

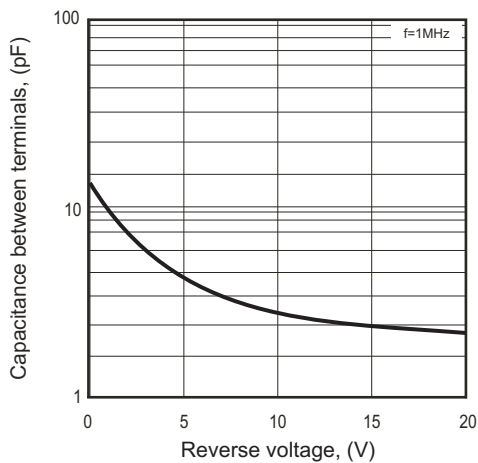


Fig.4- Dearting curve,(Io-Tc)

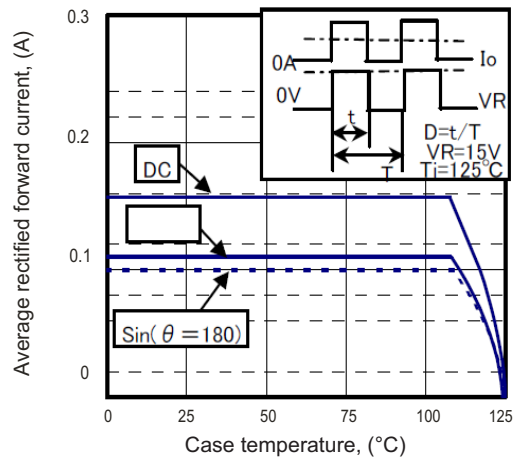
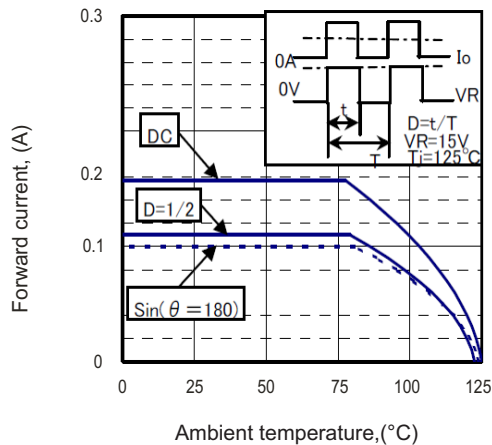
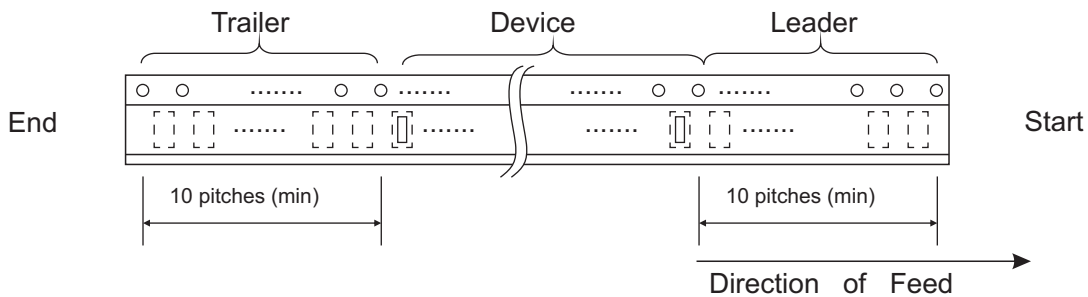
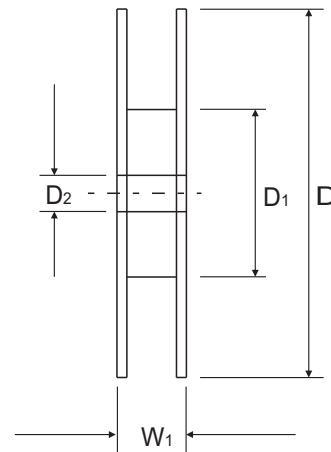
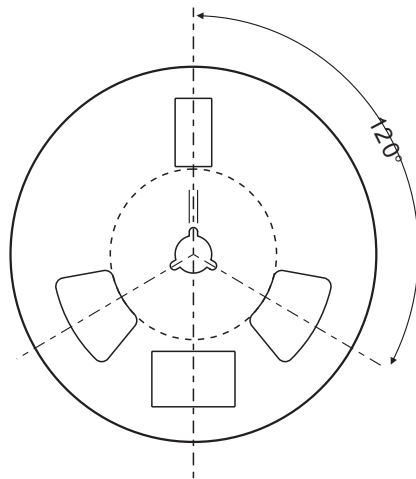
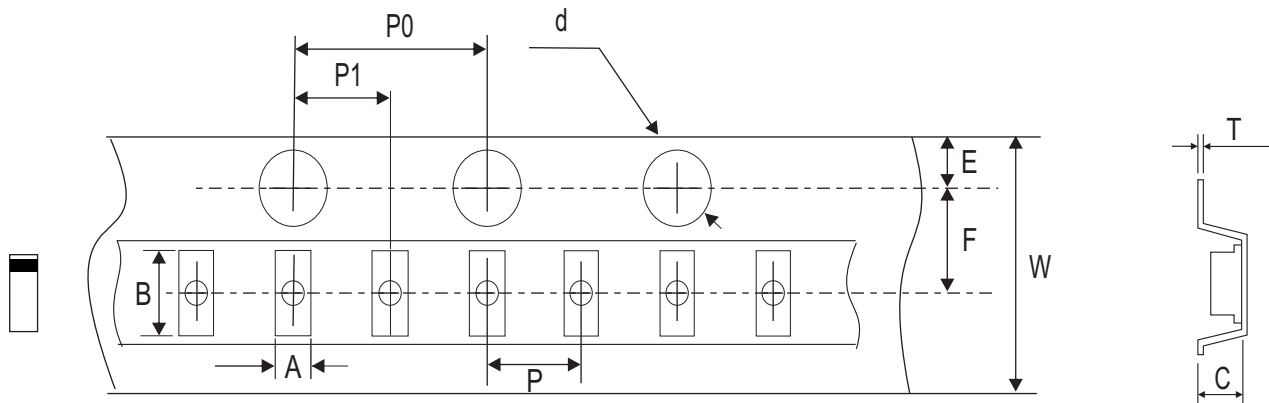


Fig.4- Dearting curve,(Io-Ta)



## Reel Taping Specification



0402 (SOD-882)	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	0.75 ± 0.10	1.15 ± 0.10	0.42 ± 0.10	1.50 + 0.10	178 MAX.	50.0 MIN.	13.0 ± 0.50
	(inch)	0.028 ± 0.002	0.044 ± 0.002	0.094 mm	0.059 + 0.004	7.008 MAX.	1.969 MIN.	0.512 ± 0.020

0402 (SOD-882)	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	T	W	W <sub>1</sub>
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	0.60 MAX.	8.30 MAX.	10.90 MAX.
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.024 MAX.	0.327 MAX.	0.43 MAX.

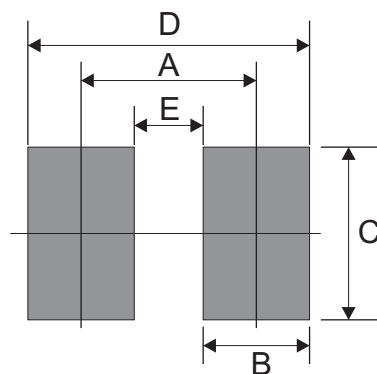
## Marking Code

Part Number	Marking Code
RB521BS-30	F



## Suggested PAD Layout

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



## Standard Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
0402/SOD-882	10,000	7