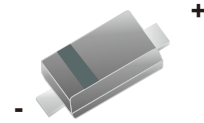


## RB521S-30-HF

$I_o = 0.2\text{ A}$   
 $V_R = 30\text{ V}$   
 RoHS Device  
 Halogen Free



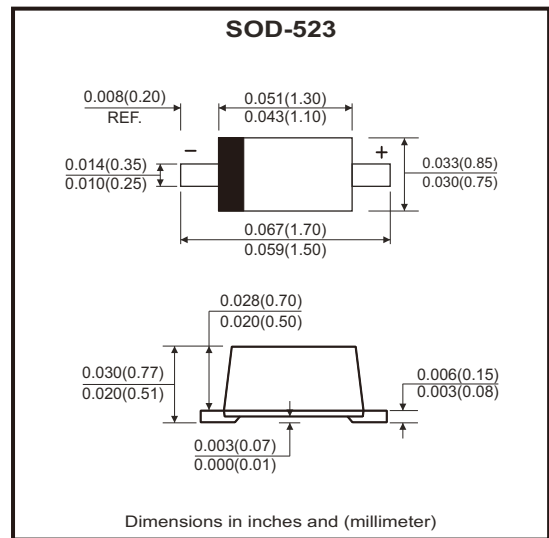
### Features

- High current capability.
- Low forward voltage drop.

### Mechanical data

- Case: SOD-523, molded plastic.
- Polarity: Color band denotes cathode end.
- Mounting position: Any.

### Circuit Diagram



### Maximum Rating (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak reverse voltage	$V_{RM}$	30	V
DC reverse voltage	$V_R$	30	V
Mean rectifying current	$I_o$	0.2	A
Peak forward surge current 8.3ms single half sine-wave	$I_{FSM}$	1.0	A
Typical thermal resistance	$R_{\theta JA}$	667	°C/W
Power dissipation	$P_D$	150	mW
Storage temperature range	$T_{STG}$	-50 to +150	°C

### Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Maximum forward voltage	$I_F = 10\text{mA}$ $I_F = 200\text{mA}$	$V_F$			0.35 0.50	V
Maximum reverse breakdown voltage	$I_R = 1\text{mA}$	$V_R$	30			V
Maximum reverse current	$V_R = 10\text{V}$	$I_R$			30	μA

## Rating and Characteristic Curves (RB521S-30-HF)

Fig.1 - Forward Characteristics

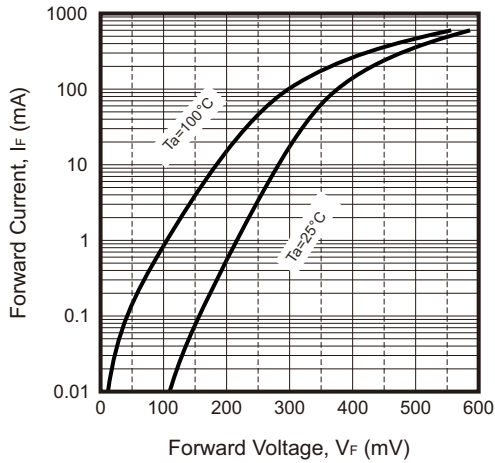


Fig.2 - Reverse Characteristics

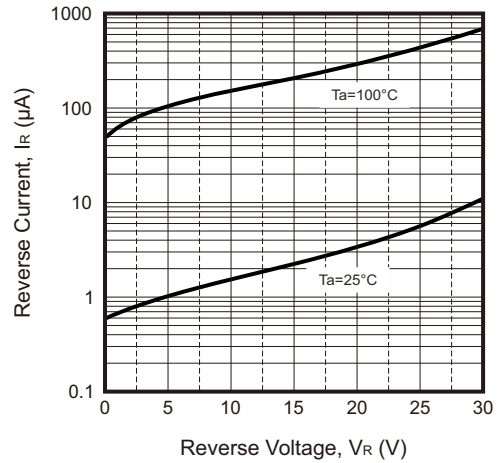


Fig.3 - Capacitance Characteristics

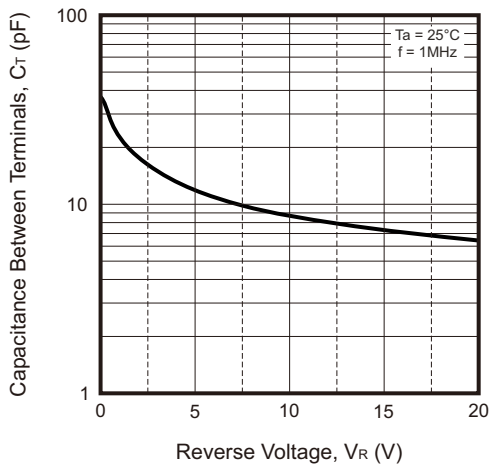
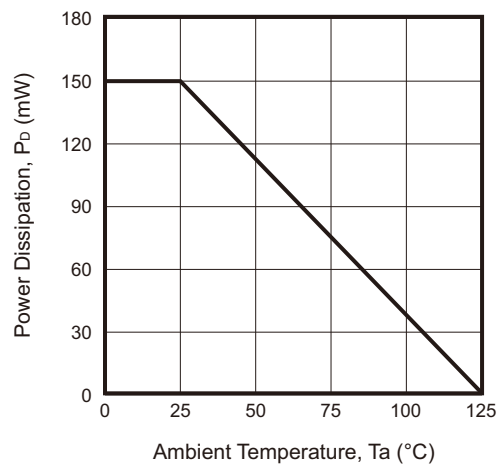
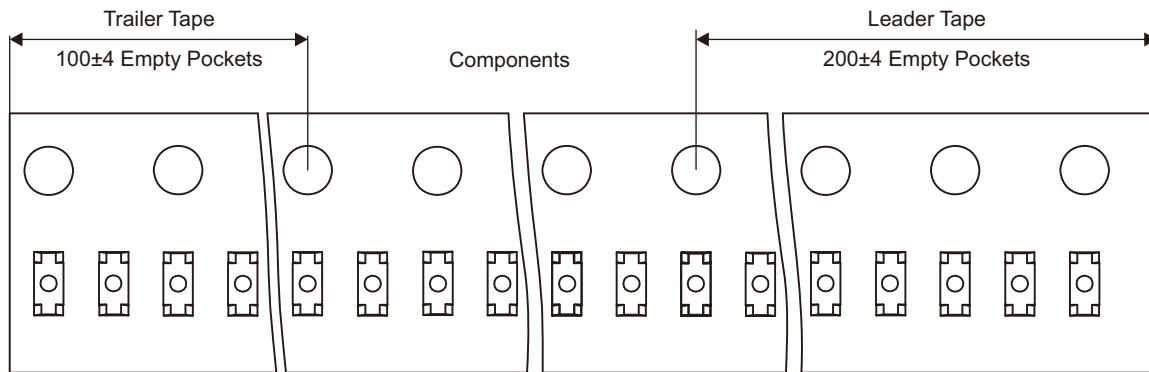
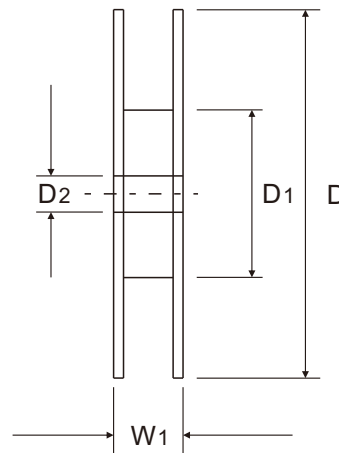
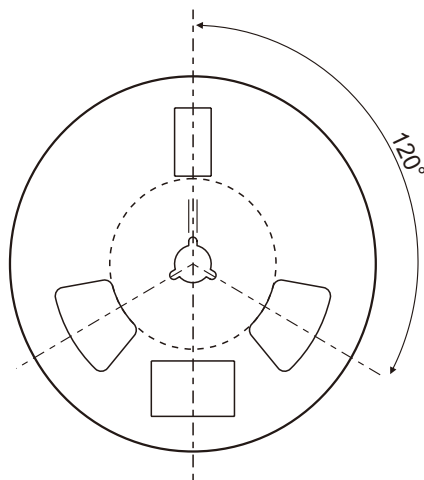
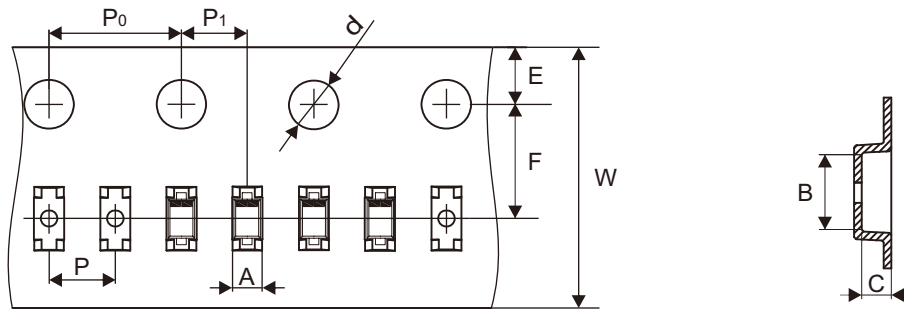


Fig.4 - Power Derating Curve



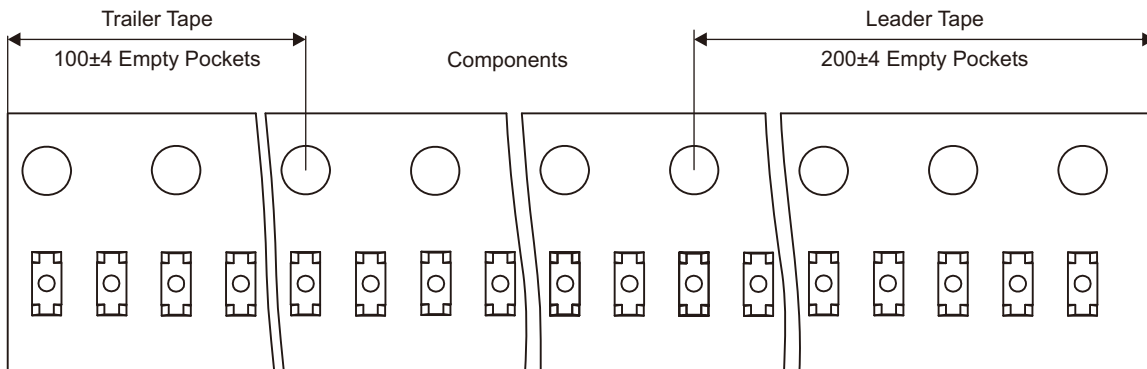
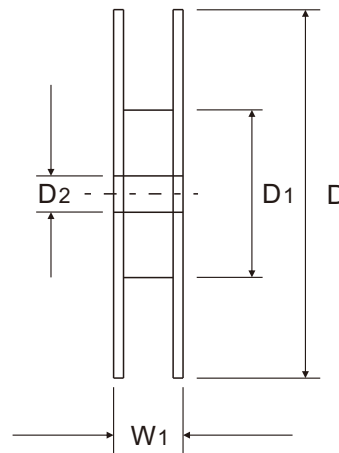
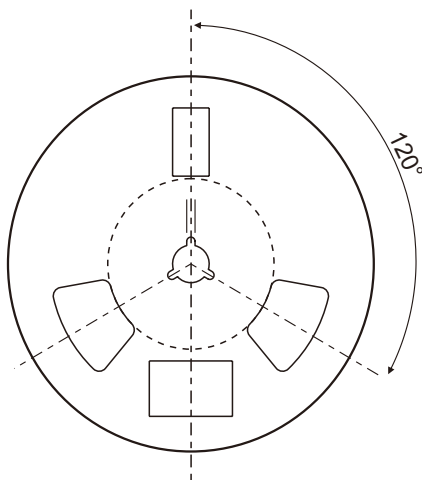
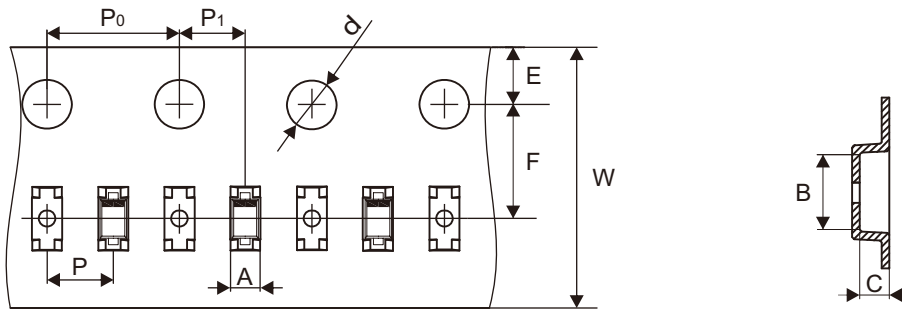
## Reel Taping Specification (For RB521S-30-F-HF)



SOD-523	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.90 ± 0.05	1.94 ± 0.05	0.73 ± 0.05	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.035 ± 0.002	0.076 ± 0.002	0.029 ± 0.002	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOD-523	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	2.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 + 0.30 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.079 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 + 0.012 - 0.004	0.484 ± 0.039

## Reel Taping Specification (For RB521S-30-H-HF)



SOD-523	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.90 ± 0.05	1.94 ± 0.05	0.73 ± 0.05	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.035 ± 0.002	0.076 ± 0.002	0.029 ± 0.002	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOD-523	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	2.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 + 0.30 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.079 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 + 0.012 - 0.004	0.484 ± 0.039

## Marking Code

Part Number	Marking Code
RB521S-30-F-HF	C
RB521S-30-H-HF	

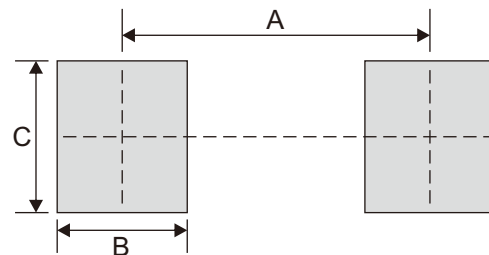


█ = Cathode band

Solid dot = Control code

## Suggested P.C.B. PAD Layout

SIZE	SOD-523	
	(mm)	(inch)
A	1.42	0.056
B	0.60	0.024
C	0.70	0.028



## Standard Packaging

Case Type		REEL PACK	
		REEL (pcs)	Reel Size (inch)
SOD-523	RB521S-30-F-HF	8,000	7
	RB521S-30-H-HF	3,000	