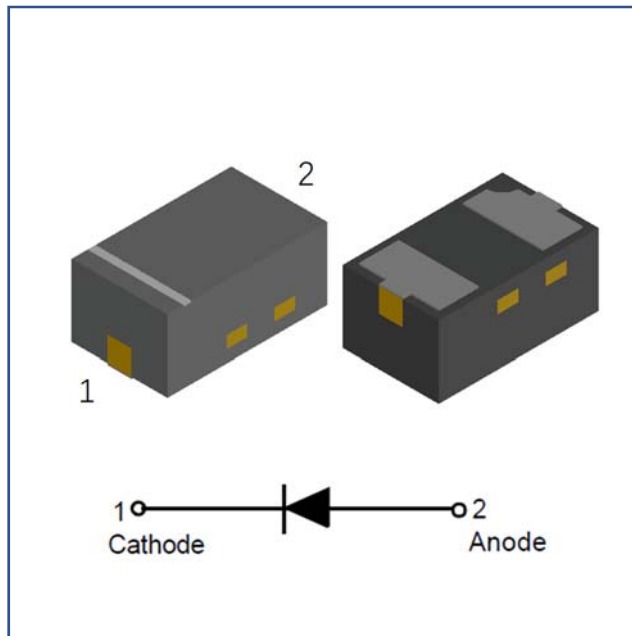


## RB521S-40L2

### Small Signal Schottky Diode



#### Features

- Moisture sensitivity level 3
- Reverse voltage: 40V
- Average forward current: 200mA

#### Application

- High frequency and low voltage rectifier

#### Mechanical data

- **Package:** DFN1006-2L
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

#### ■ Maximum Ratings ( $T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Parameter	Symbol	Unit	Value
Device marking code			T
Repetitive peak reverse voltage	$V_{RRM}$	V	40
Forward current	$I_F$	mA	200
Non-repetitive surge peak forward current @ $t=8.3\text{ms}$ half-sine wave	$I_{FSM}$	A	0.5
Non-repetitive surge peak forward current @ $t=1\text{ms}$ square wave			1
Power dissipation	$P_D$	mW	100
Junction temperature	$T_J$	$^{\circ}\text{C}$	-55 to +125
Storage temperature	$T_{STG}$	$^{\circ}\text{C}$	-55 to +125

## RB521S-40L2

### ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Reverse voltage	V <sub>R</sub>	V	I <sub>R</sub> =100uA	40		
Forward voltage	V <sub>F</sub>	V	I <sub>F</sub> =200mA			0.59
Reverse leakage current	I <sub>R</sub>	uA	V <sub>R</sub> =30V			5

### ■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	R <sub>θJ-A</sub> <sup>(1)</sup>	°C/W	1000
Thermal resistance, junction-to-case	R <sub>θJ-C</sub> <sup>(1)</sup>	°C/W	800

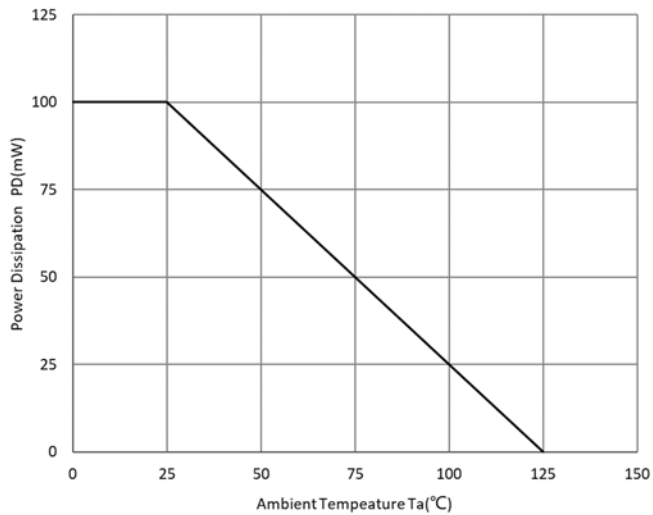
#### Note:

(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 1.7cm\*1cm copper pad areas;

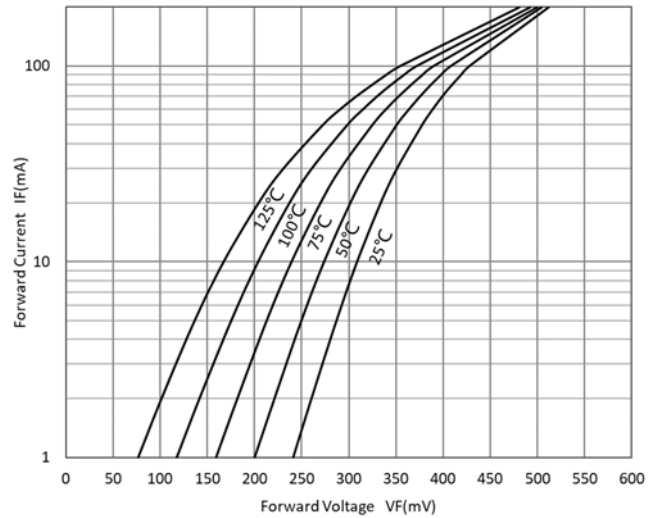
## RB521S-40L2

### ■ Characteristics

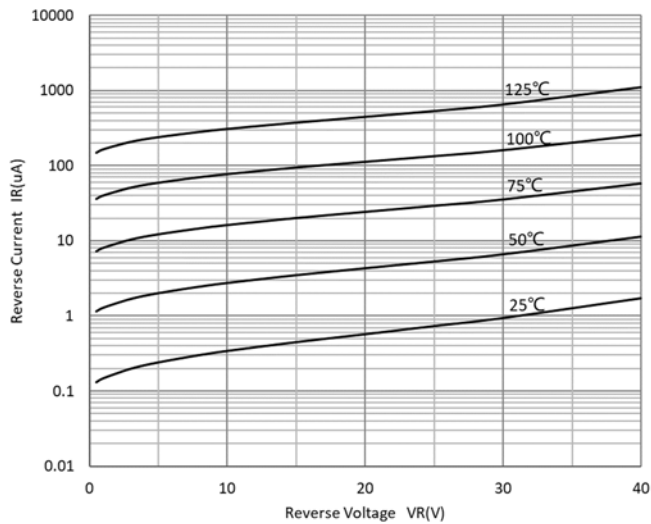
**Fig 1:  $P_D$ -Ta Curve**



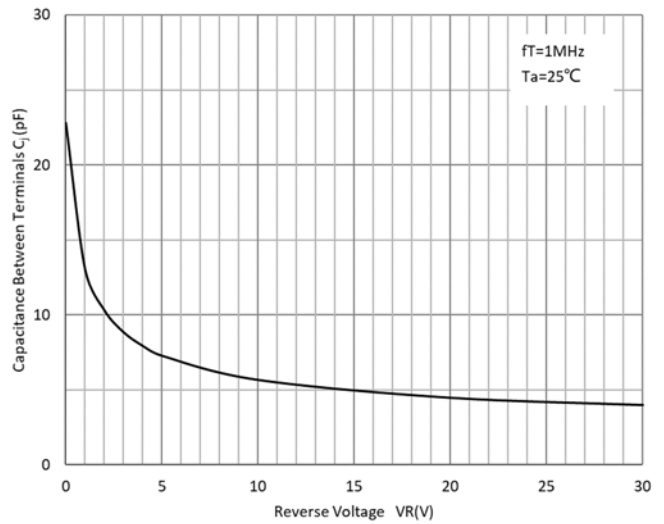
**Fig 2: Capacitance Capability**



**Fig 3: Typical Forward Characteristics**



**Fig 4: Typical Reverse Characteristics**

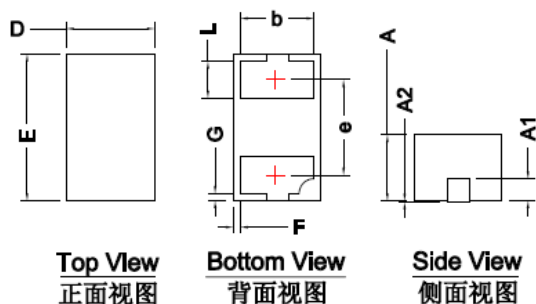


## RB521S-40L2

### ■ Ordering Information

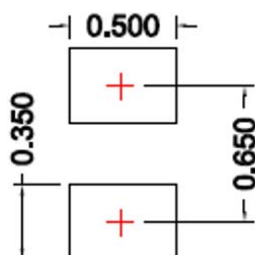
Preferred P/N	Packing Code	Unit Weight(g)	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
RB521S-40L2	F1	Approximate 0.9	10000	100000	400000	Tape & Reel

### ■ Outline Dimensions



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
D	0.50	0.60	0.70
E	0.90	1.00	1.10
A	0.35	0.45	0.55
A1	0.15 BSC		
A2			0.10
F	0.005		
G	0.005		
L	0.15	0.25	0.35
b	0.41	0.50	0.59
e	0.65 BSC		

### ■ Suggested Pad Layout



## RB521S-40L2

---

### Disclaimer

The information presented in this document is for reference only. Shanghai Sunco Electronics Co., Ltd reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function, or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Russiansunco or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.russiansunco.com](http://www.russiansunco.com) , or consult your nearest Russiansunco's sales office for further assistance.