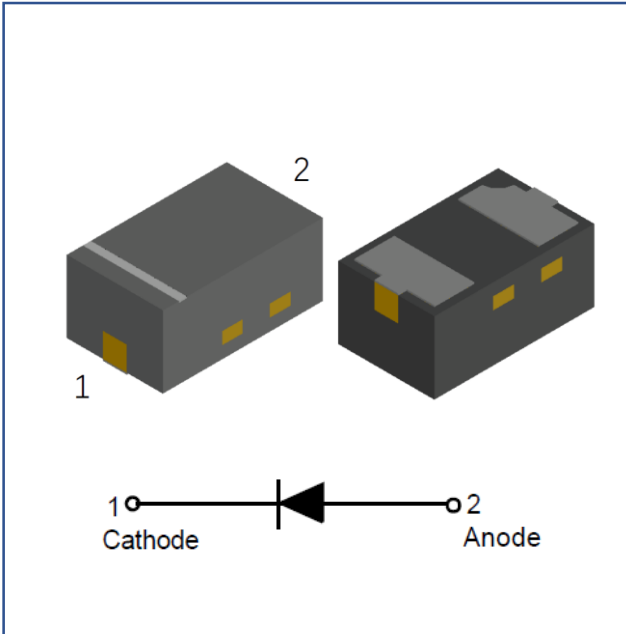


## Small Signal Schottky Diode



### 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<sub>a</sub>=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Value
Device marking code			T
Repetitive peak reverse voltage	V <sub>RRM</sub>	V	40
Forward current	I <sub>F</sub>	mA	200
Non-repetitive surge peak forward current @ t=8.3ms half-sine wave	I <sub>FSM</sub>	A	0.5
Non-repetitive surge peak forward current @ t=1ms square wave			1
Repetitive Peak Forward Current @ t <sub>p</sub> =1ms, δ=0.25	I <sub>FRM</sub>	A	0.5
Power dissipation	P <sub>D</sub>	mW	100
Junction temperature	T <sub>J</sub>	°C	-55 to +125
Storage temperature	T <sub>STG</sub>	°C	-55 to +125

**■ Electrical Characteristics** ( $T_a=25^\circ\text{C}$  Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Reverse voltage	$V_R$	V	$I_R=100\mu\text{A}$	40		
Forward voltage	$V_F$	V	$I_F=200\text{mA}$			0.59
Reverse leakage current	$I_R$	$\mu\text{A}$	$V_R=30\text{V}$			5

**■ Thermal Characteristics**

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	$R_{\theta J-A}^{(1)}$	$^\circ\text{C/W}$	1000
Thermal resistance, junction-to-case	$R_{\theta J-C}^{(1)}$	$^\circ\text{C/W}$	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;



■ Characteristics

Fig 1: P<sub>D</sub>-T<sub>a</sub> Curve

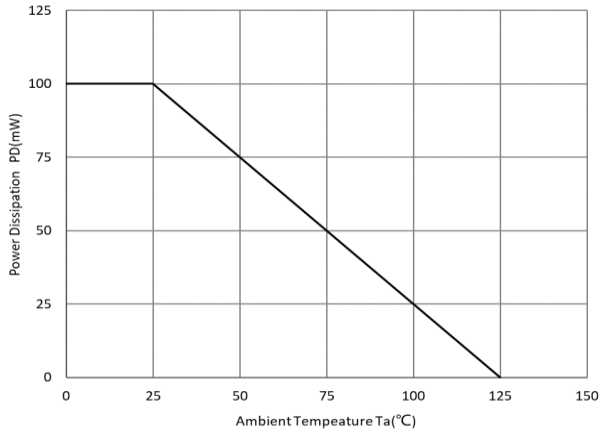


Fig 2: Capacitance Capability

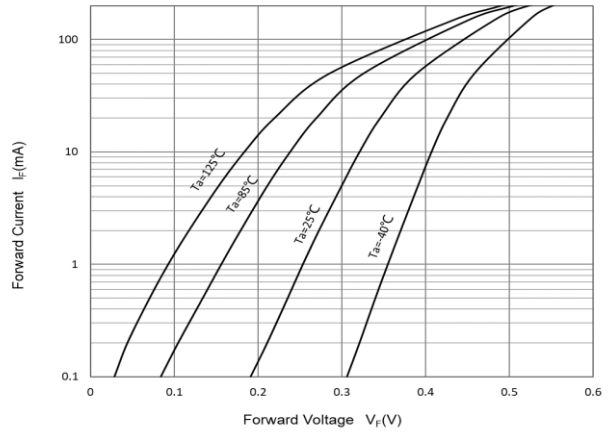


Fig 3: Typical Forward Characteristics

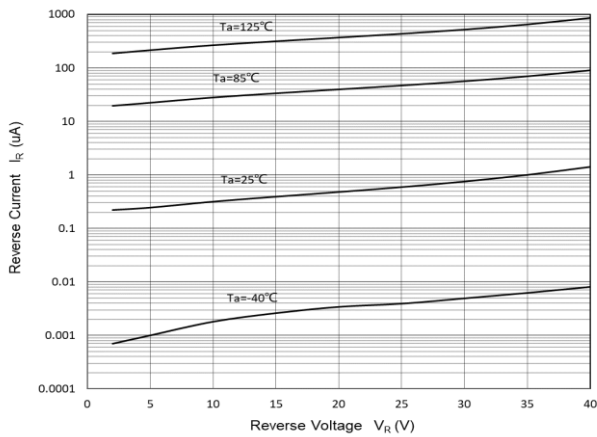
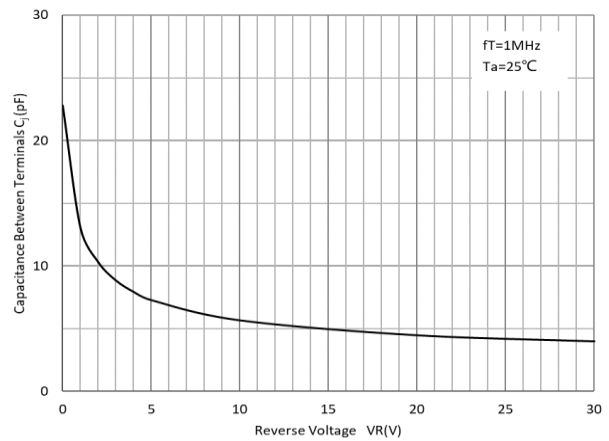


Fig 4: Typical Reverse Characteristics

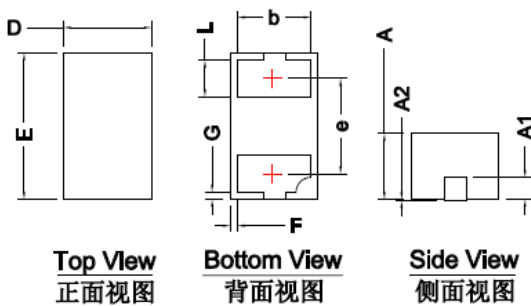




## ■ Ordering Information

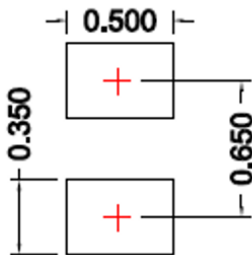
Preferred P/N	Packing Code	Unit Weight(g)	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
RB521S-40L2	F1	Approximate 0.9	10000	100000	400000	Tape & Reel

## ■ 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





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