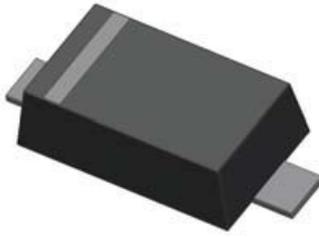


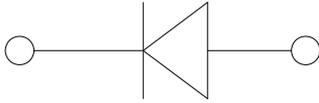
## RB751S-40

### Small Signal Schottky Diode



#### Features

- $V_R$  30V
- $I_{FM}$  30mA



#### Mechanical Data

- **Package:** SOD523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** 4B

#### ■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Peak reverse voltage	$V_{RM}$	V		40
Reverse voltage	$V_R$	V		30
Forward continuous current	$I_{FM}$	mA	$T_a=25^\circ\text{C}$	30
Non-repetitive Peak Forward Surge Current@t=8.3ms	$I_{FSM}$	A		0.2
Repetitive Peak Forward Current	$I_{FRM}$	A	tp=1ms, $\delta=0.25$	1
Power dissipation	$P_D$	mW		150
Maximum junction temperature	$T_j$	°C		125
Storage temperature range	$T_{stg}$	°C		-55 to +150
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	°C/W		667

#### ■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	Min	Max
Reverse Breakdown Voltage	$V_R$	V	$I_R=10\mu\text{A}$	30	
Maximum Forward voltage	$V_F$	V	$I_F=1\text{mA}$		0.37
Maximum Reverse current	$I_R$	$\mu\text{A}$	$V_R=30\text{V}$		0.5
Maximum Junction capacitance	$C_J$	pF	$V_R=0\text{V}$ , $f=1\text{MHz}$		5



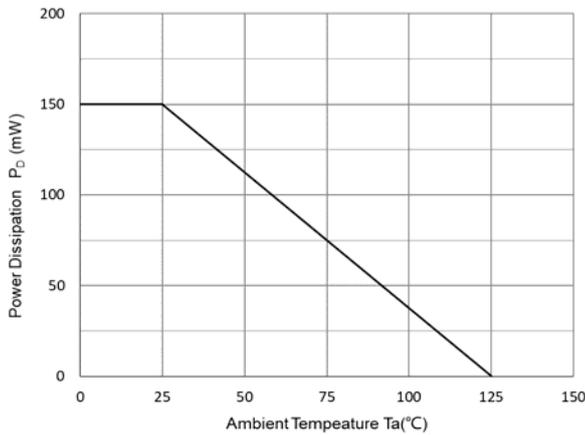
# RB751S-40

## ■ Ordering Information (Example)

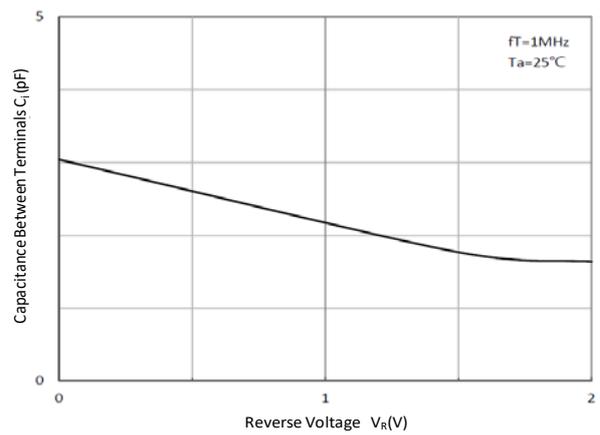
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
RB751S-40	F2	Approximate 0.002	8000	80000	320000	7" reel

## ■ Characteristics (Typical)

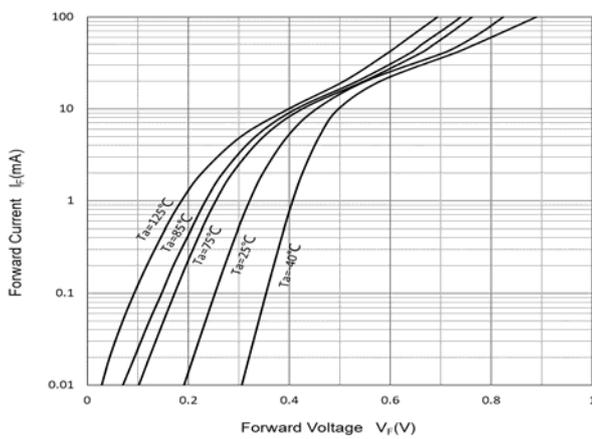
**Fig 1: P<sub>D</sub>-T<sub>a</sub> Curve**



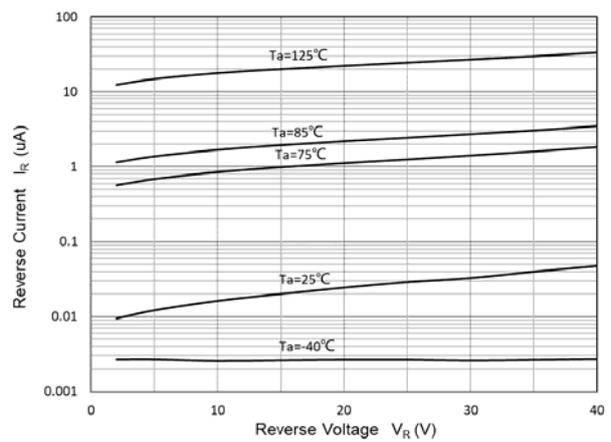
**Fig 2: Capacitance Capability**



**Fig 3: Typical Forward Characteristics**



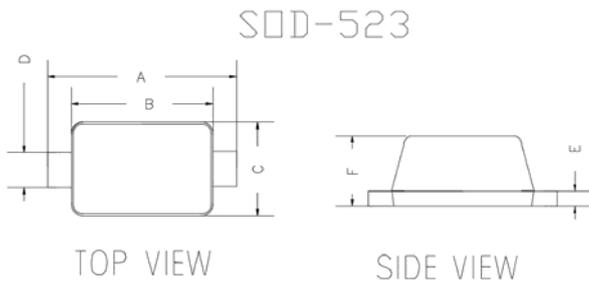
**Fig 4: Typical Reverse Characteristics**





# RB751S-40

## ■ Outline Dimensions

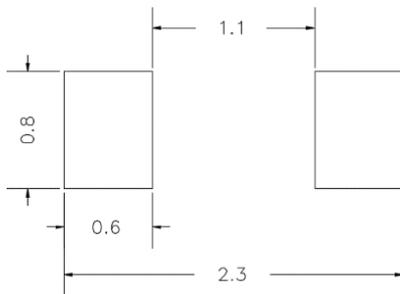


DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.059	0.067	1.500	1.700
B	0.043	0.051	1.100	1.300
C	0.028	0.035	0.700	0.900
D	0.010	0.014	0.250	0.350
E	0.002	0.008	0.050	0.200
F	0.020	0.028	0.500	0.700

Note:

- All dimensions are in millimeters (mm) unless otherwise specified.  
[所有尺寸均以毫米为单位，除非另有说明]
- General tolerances:  $\pm 0.10\text{mm}$  unless otherwise specified.  
[通用公差为 $\pm 0.10\text{mm}$ ，除非另有说明]
- Dimensions and tolerances per ASME Y14.5M-2018.  
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
- All dimensions shown are exclusive of burrs and gate residues.  
Burrs and gate vestiges shall not exceed 0.15 mm in maximum.  
[所有尺寸均不包括毛刺和浇口残留。毛刺与浇口残留的尺寸最大不得超过 0.15mm]
- Dimension b does not include dambar protrusion of max 0.100 mm per side.  
[尺寸b不包括单边最大0.100 MM的中筋凸出部分]
- Dimensions B and C are the overall extreme outer dimensions of the mold compound. These dimensions exclude mold flash, lead flash, protrusions and burrs but include the maximum allowable mold mismatch.  
[B和C是塑封体的外部极限尺寸，不包括包封溢料、内引线溢料、凸出部分以及胶体毛刺，但是包含了包封错位的最大尺寸]
- Formed leads shall be planar with respect to one another within a maximum of 0.076 mm relative to the seating plane.  
[成型的管脚应为同一平面，共面性最大为0.1mm]

## ■ Soldering Footprint



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT



## RB751S-40

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