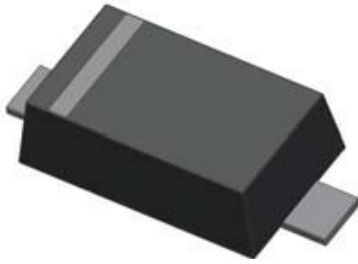
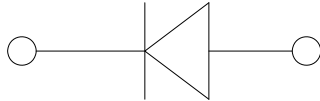


Small-Signal Schottky Diodes


SOD523


Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- V_{RRM} 40V
- I_{FAV} 30mA
- Part no. with suffix "Q" means AEC-Q101 qualified

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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V_{RRM}	V		40
Peak Forward Surge Current	I_{FSM}	A	Square wave $t_p < 8.3\text{ms}$	1
Average forward current	I_{FAV}	mA		30
Thermal Resistance Junction to Ambient	R_{thJA}	$^\circ\text{C/W}$		625
Power dissipation	P_D	mW		200
Maximum junction temperature	T_J	$^\circ\text{C}$		-55 to +150
Storage temperature range	T_{stg}	$^\circ\text{C}$		-55 to +150



RB751S-40Q

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

PARAMETER	Symbol	UNIT	Conditions	Min	Max
Breakdown Voltage	V _{BR}	V	I _R =10uA	40	
Forward Voltage	V _F	V	I _F =1mA		0.37
Reverse Leakage Current	I _R	uA	V _R =30V		0.50
Capacitance	C _j	pF	V _R =0V, f=1MHz		5
Reverse Recovery Time	T _{rr}	ns	I _F =I _R =10mA, I _{rr} =0.1*I _R , R _L =100Ω		7

■Ordering Information (Example)

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



■ Characteristics (Typical)

Fig.1: PD- T_A

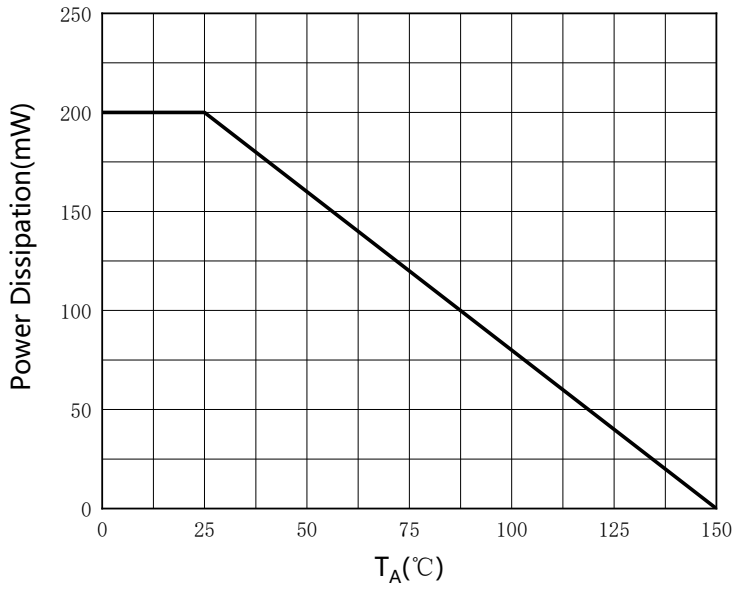


Fig.2: Capacitance Characteristics

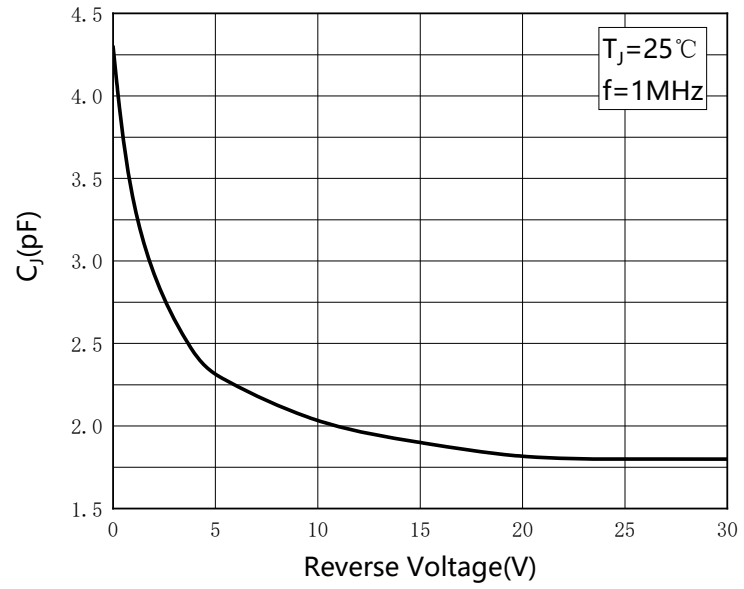


Fig.3: Forward Characteristics

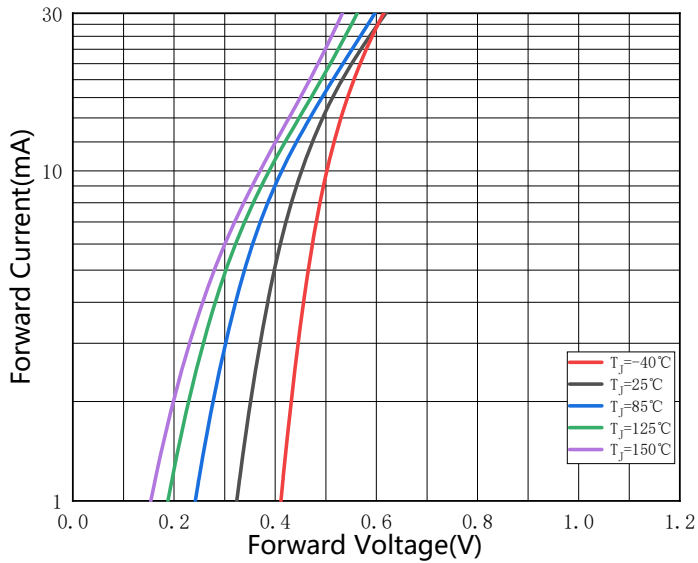
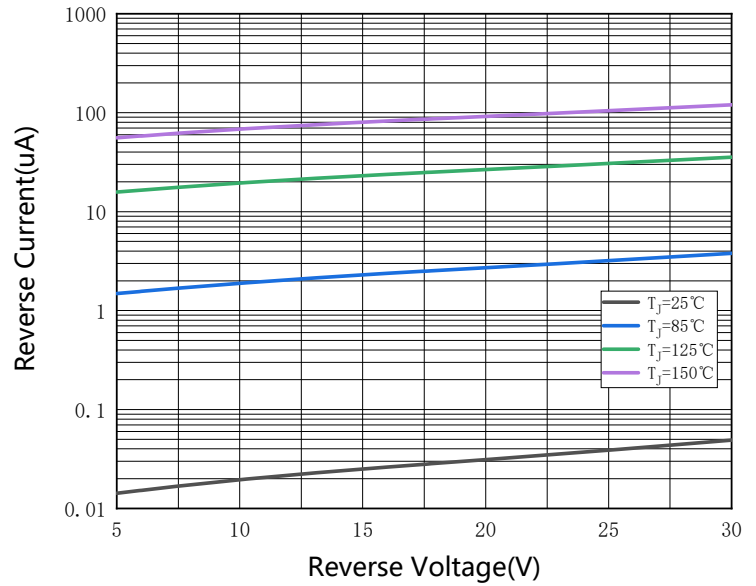


Fig.4: Reverse Characteristics

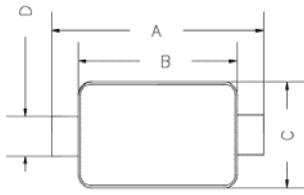




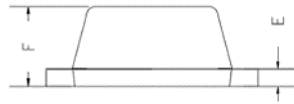
RB751S-40Q

■ Outline Dimensions

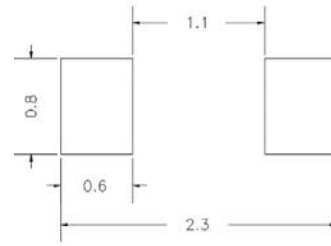
SOD-523



TOP VIEW



SIDE VIEW

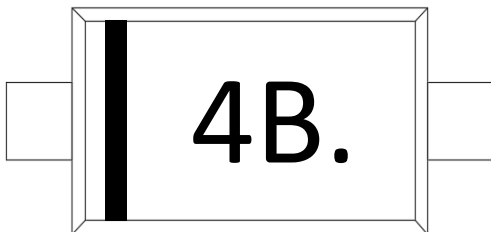


UNIT : mm

SUGGESTED SOLDER PAD LAYOUT

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

■ Marking Information



Note:

1. All marking is at middle of the product body
2. All marking is in laser marking
3. Body color: Black



Disclaimer

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