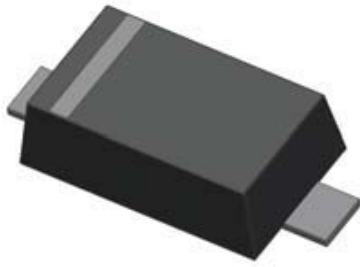
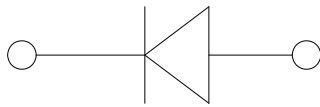


Small Signal Schottky Barrier Diode



SOD523



Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- V_{RRM} 30V
- I_{FAV} 200mA
- Part no. with suffix "Q" means AEC-Q101 qualified

Applications

- Low Forward Voltage Drop
- Automotive

Mechanical Data

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

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Maximum Repetitive peak reverse voltage	V_{RRM}	V		30
DC Blocking Voltage	V_R	V		30
Average Forward Current	I_{FAV}	mA		200
Peak Forward Surge Current	I_{FSM}	A	8.3ms, half sine	2
Power Dissipation	P_{tot}	mW		150
Thermal Resistance Junction to Ambient	R_{thJA}	K/W		667
Junction Temperature	T_J	$^\circ\text{C}$		-55 to +125
Storage Temperature Range	T_{stg}	$^\circ\text{C}$		-55 to +125



RB520S-30Q

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	MAX
Forward Voltage	V _F	V	I _F =200mA		0.6
Reverse Leakage Current	I _R	uA	V _R =10V		1
Reverse Breakdown Voltage	V _{BR}	V	I _R =0.1mA	30	
Junction Capacitance	C _J	pF	V _R =1V, f =1MHz	10	20
Reverse Recovery Time	t _{rr}	ns	I _F =I _R =10mA, I _{rr} =1mA, R _L =100Ω		10

■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
RB520S-30Q	F2	Approximate 0.002	8000	80000	320000	7" reel



■ Characteristics (Typical)

Fig.1: P_D - T_A

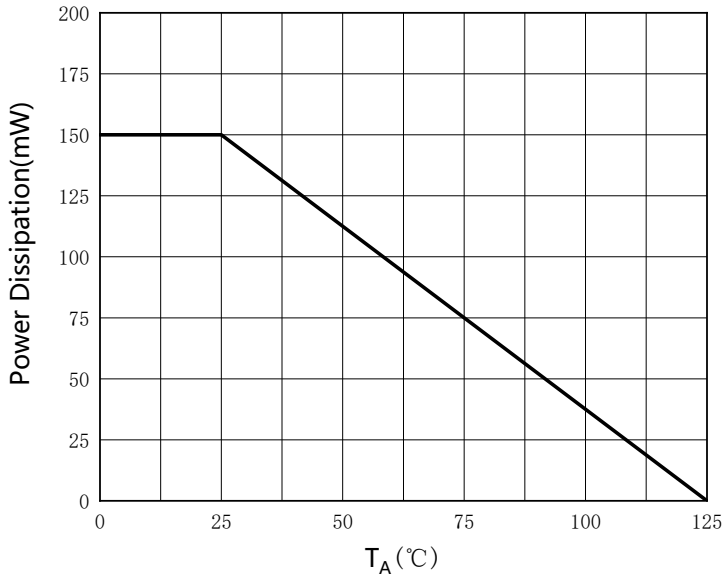


Fig.2: Capacitance Characteristics

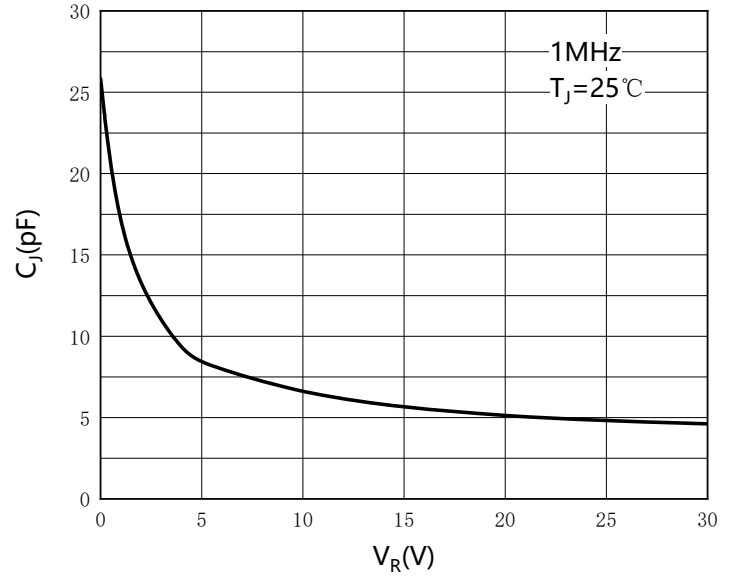


Fig.3: Forward Characteristics

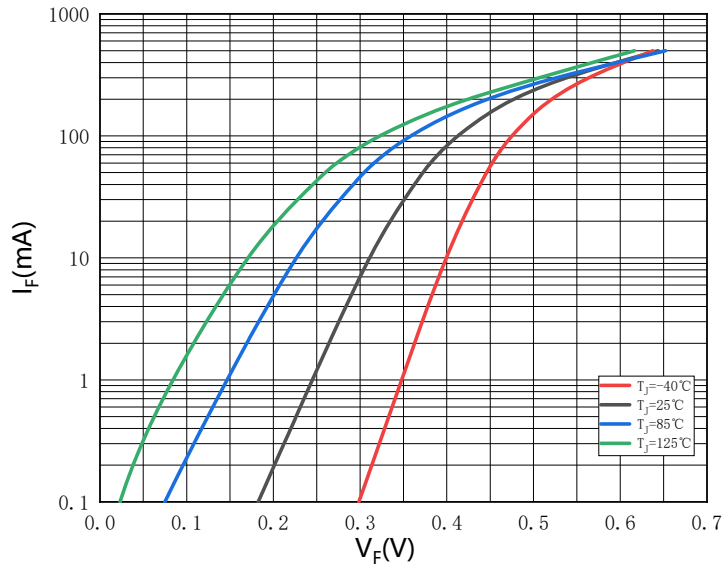
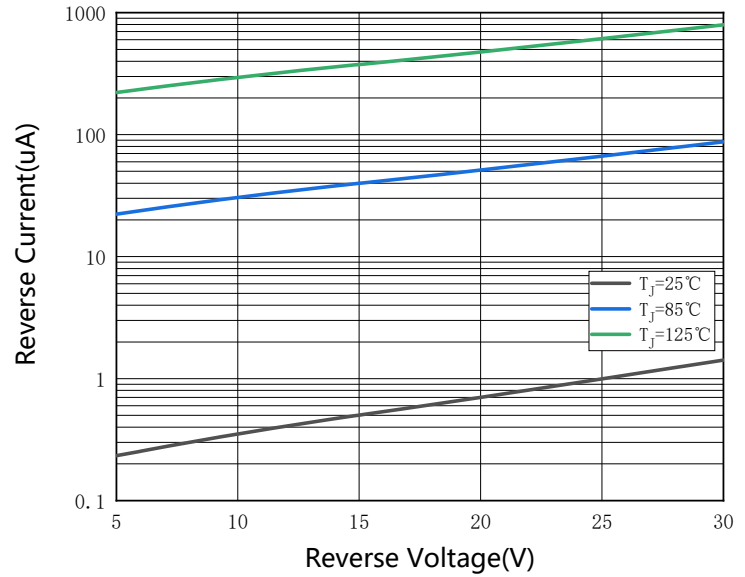


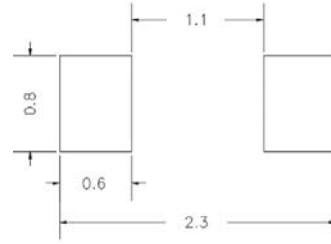
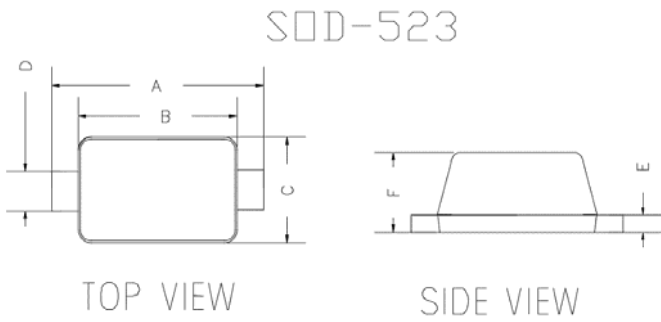
Fig.4: Reverse Characteristics





RB520S-30Q

■ Outline Dimensions

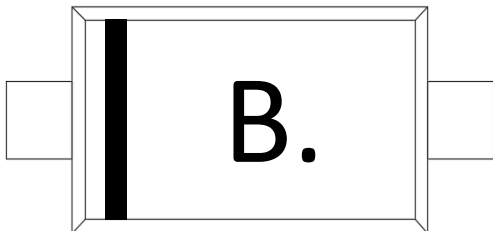


UNIT : mm

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

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology 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 automotive electronics, are not designed for use in medical, life-saving, life-sustaining, or military, Yangjie 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.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.