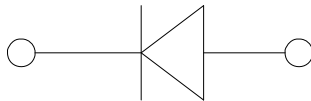
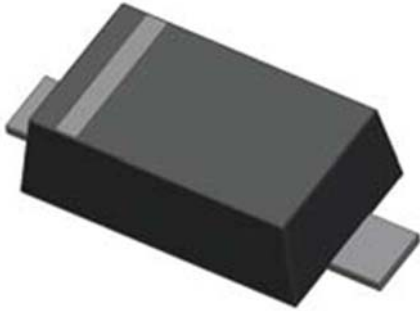


Schottky Barrier Diode



Features

- Moisture sensitivity level 1
- Reverse voltage: 30V
- Average forward current : 200mA

Application

- High frequency and low voltage rectifier

Mechanical data

- **Package:** SOD-523
- **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			B
Reverse voltage	V_R	V	30
Forward current	I_F	mA	200
Non-repetitive surge peak forward current @ t=8.3ms half-sine wave	I_{FSM}	A	1
Non-repetitive surge peak forward current @ t=1ms square wave			2.5
Power dissipation	P_D	mW	150
Junction temperature	T_J	$^{\circ}\text{C}$	-40 to +125
Storage temperature	T_{STG}	$^{\circ}\text{C}$	-40 to +125

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

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Breakdown voltage	V_R	V	$I_R=500\mu\text{A}$	30		
Forward voltage	V_F	V	$I_F=200\text{mA}$			0.6
Reverse leakage current	I_R	μA	$V_R=10\text{V}$			1

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	$R_{\theta J-A}^{(1)}$	$^{\circ}\text{C/W}$	667
Thermal resistance, junction-to-case	$R_{\theta J-C}^{(1)}$	$^{\circ}\text{C/W}$	533

Note:

(1) Thermal resistance from junction to ambient and from junction to case mounted on P.C.B. with 8mm*9mm copper pad areas



■ Characteristics

Fig 1: P_D - T_a Curve

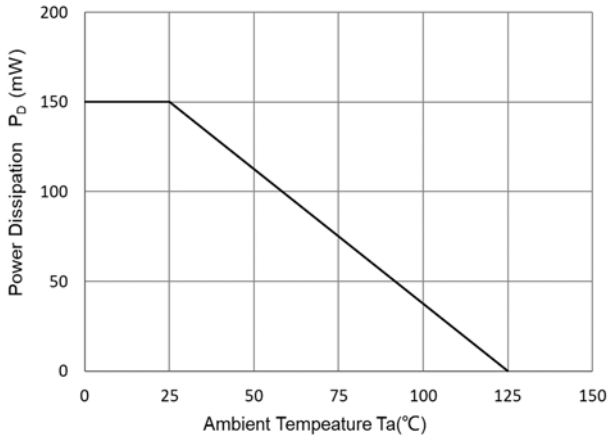


Fig 2: Capacitance Capability

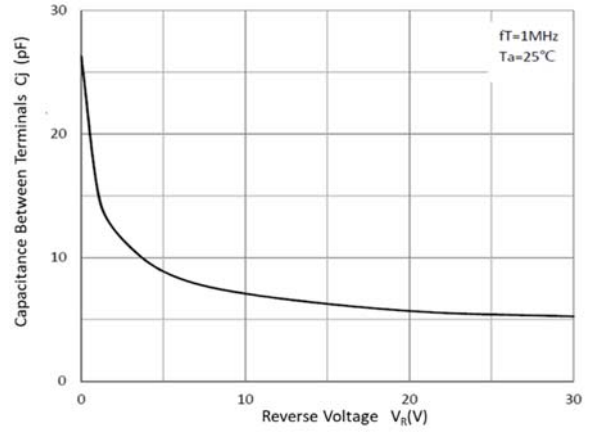


Fig 3: Typical Forward Characteristics

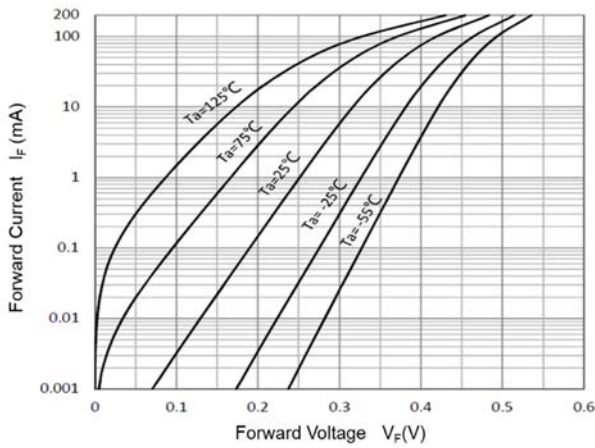
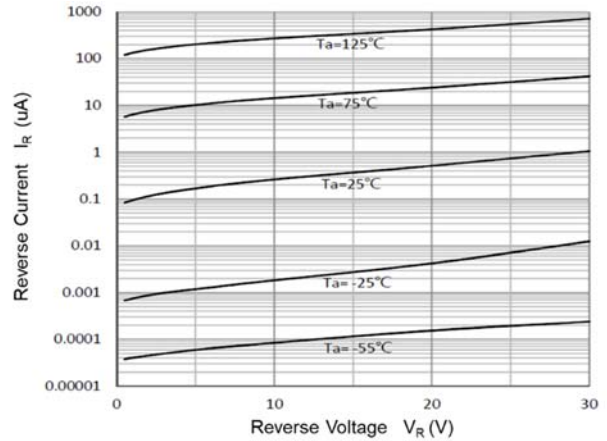


Fig 4: Typical Reverse Characteristics

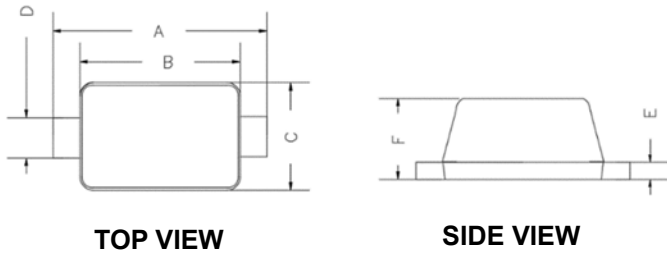




■ Ordering Information

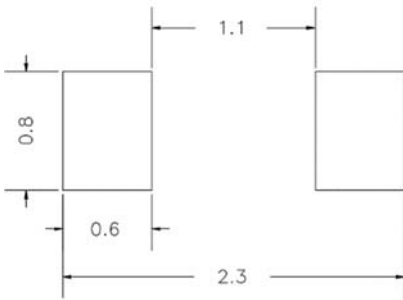
Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
RB520S-30	F2	Approximate 0.002	8000	80000	320000	7" reel
RB520S-30	F3	Approximate 0.002	3000	30000	120000	7" reel

■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MM	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

■ Suggested Pad Layout



UNIT: mm



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