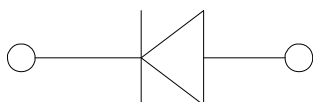
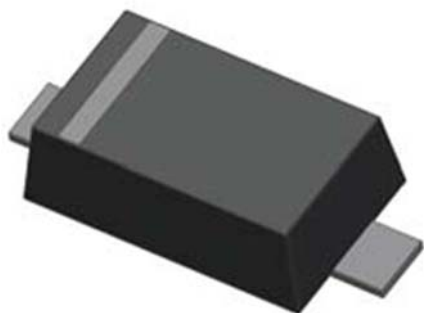


Schottky Barrier Diode



Features

- Moisture sensitivity level 1
- Reverse voltage: 100V
- 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			41
Reverse voltage	V_R	V	100
Forward current	I_F	mA	200
Non-repetitive surge peak forward current @ $t=10\text{ms}$	I_{FSM}	A	1
Power dissipation	P_D	mW	150
Junction temperature	T_J	$^{\circ}\text{C}$	-65 to +150
Storage temperature	T_{STG}	$^{\circ}\text{C}$	-65 to +150



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

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Breakdown voltage	V _R	V	I _R =100uA	100		
Forward voltage	V _F	V	I _F =1mA			0.45
			I _F =200mA			1
Reverse leakage current	I _R	uA	V _R =50V			0.1
Junction Capacitance	C _J	pF	V _R =1V, f=1MHz			10
Reverse Recovery Time	T _{rr}	ns	I _F =I _R =10mA, I _{rr} =0.1*I _R , R _L =100Ω			4

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	R _{θJ-A} ⁽¹⁾	°C/W	667
Thermal resistance, junction-to-case	R _{θJ-C} ⁽¹⁾	°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



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■ Characteristics

Fig 1: P_D - T_a Curve

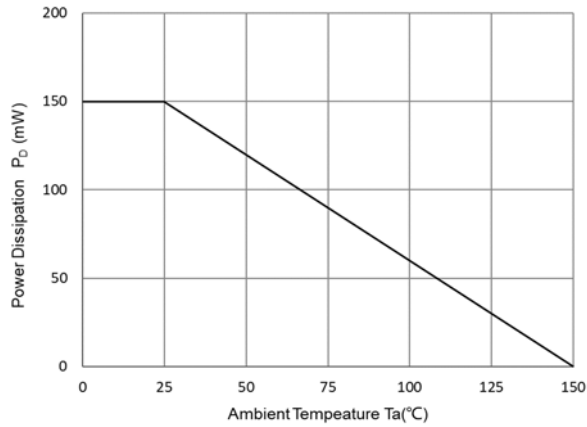


Fig 2: Capacitance Capability

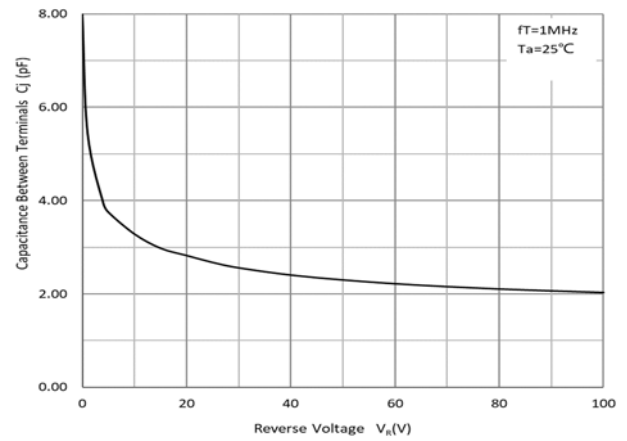


Fig 3: Typical Forward Characteristics

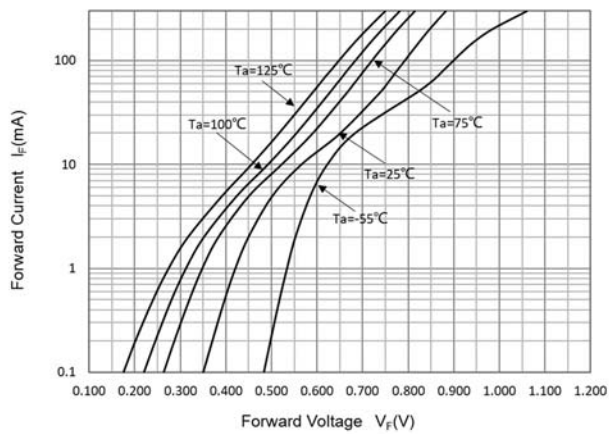
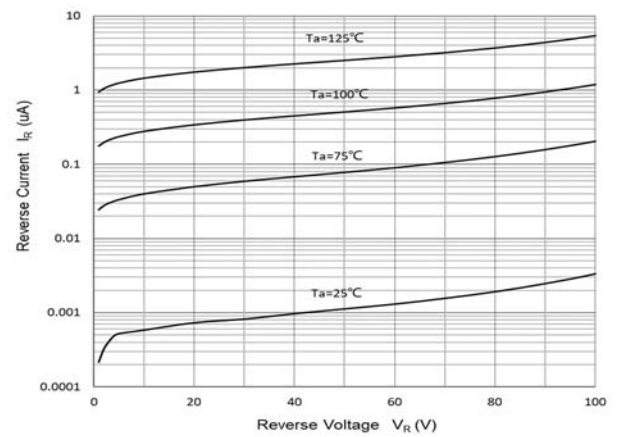


Fig 4: Typical Reverse Characteristics



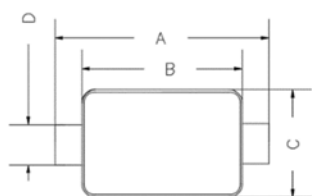


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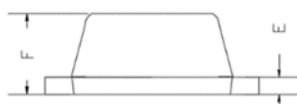
■ Ordering Information

Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
BAT41WX	F2	Approximate 0.002	8000	80000	320000	7" reel
BAT41WX	F3	Approximate 0.002	3000	30000	120000	7" reel

■ Outline Dimensions



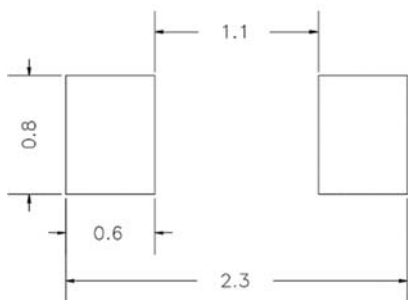
TOP VIEW



SIDE VIEW

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



BAT41WX

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