

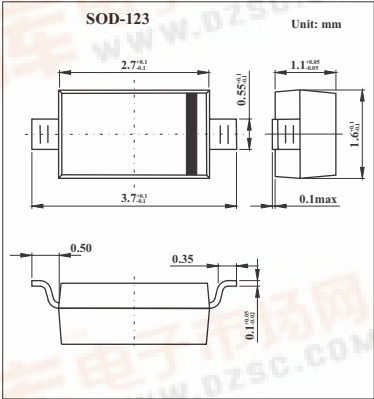
SMD Type

Diodes

SURFACE MOUNT SCHOTTKY BARRIER DIODE
BAT46W

■ Features

- Low Turn-on Voltage
- Guard Ring Construction for Transient
- Surface Mount Package Ideally Suited for Automatic Insertion Protection



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	VRRM	100	V
Working Peak Reverse Voltage	VRWM	100	V
DC Blocking Voltage	VR	100	V
Average Rectified Forward Current	IO	75	mA
Forward Continuous Current (Note 1)	IF	150	mA
Repetitive Peak Forward Current (Note 1) @ tp < 1.0s, Duty Cycle < 50%	IFRM	350	mA
Forward Surge Forward Current (Note 1) @ tp = 10ms	IFSM	750	mA
Power Dissipation (Note 1)	Pd	200	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	RθJA	500	°C/W
Operating and Storage Temperature Range	Tj, TSTG	-55 to + 125	°C

Note:

1. Part mounted on FR-4 board with recommended pad layout.

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■ Electrical Characteristics Ta = 25 °C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage (Note 2)	V _{(BR)R}	I _R = 100 μ A	100			V
Forward Voltage Drop (Note 2)	V _F	I _F = 0.1 mA I _F = 10 mA I _F = 250 mA			0.25 0.45 1.00	V
Peak Reverse Current (Note 2)	I _R	V _R = 1.5V V _R = 1.5V, T _j = 60 °C V _R = 10V V _R = 10 V, T _j = 60 °C V _R = 50 V V _R = 50 V, T _j = 60 °C V _R = 75 V V _R = 50 V, T _j = 60 °C			0.5 5.0 0.8 7.5 2.0 15 5.0 20	μ A
Total Capacitance	C _T	V _R = 0V, f = 1.0MHz V _R = 1.0V, f = 1.1MHz		10 6.0		pF

Note

2.Short duration pulse test used to minimize self-heating effect.

■ Marking

Marking	S9
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