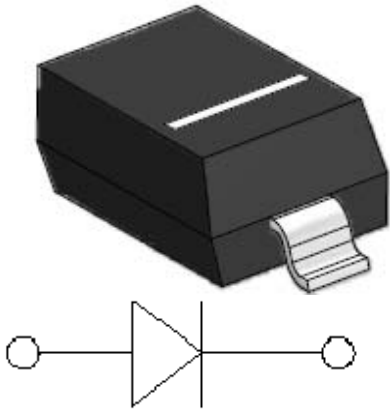


Small Signal Schottky Diode



Features

- V_R 100V
- I_{FAV} 150mA

Mechanical Data

- **Package:** SOD-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** S9

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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V_{RRM}	V		100
Non-Repetitive Peak Forward Surge Current	I_{FSM}	mA	$t_p=8.3\text{ms}$	750
Average forward current	I_{FAV}	mA		150
Power dissipation	P_D	mW		200
Thermal Resistance From Junction To Ambient	R_{thJA}	$^\circ\text{C}/\text{W}$		625
Junction temperature	T_j	$^\circ\text{C}$		125
Storage temperature range	T_{stg}	$^\circ\text{C}$		-55 to +150

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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Maximum Forward voltage	V_F	V	$I_F=0.1\text{mA}$	0.25
		V	$I_F=10\text{mA}$	0.45
		V	$I_F=250\text{mA}$	1
Maximum Reverse current	I_R	μA	$V_R=1.5\text{V}$	0.3
		μA	$V_R=10\text{V}$	0.5
		μA	$V_R=50\text{V}$	1
		μA	$V_R=75\text{V}$	2
Minimum Breakdown voltage	V_R	V	$I_R=100\mu\text{A}$	100
Maximum Diode capacitance	C_D	pF	$V_R=0\text{V}, f=1\text{MHz}$	20
			$V_R=1\text{V}, f=1\text{MHz}$	12



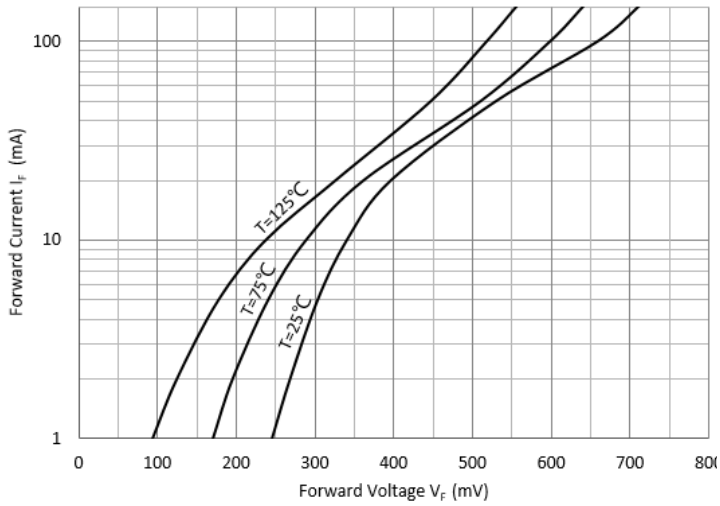
BAT46WS

Ordering Information (Example)

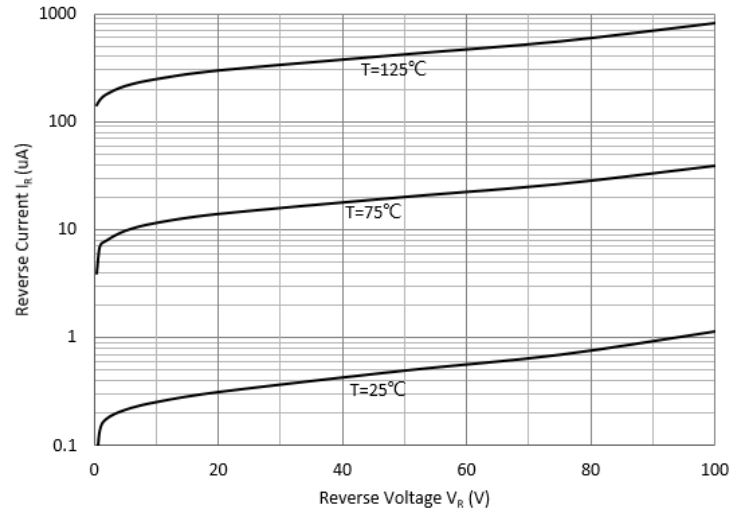
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT46WS	F2	Approximate 0.004	3000	30000	120000	7" reel

Characteristics (Typical)

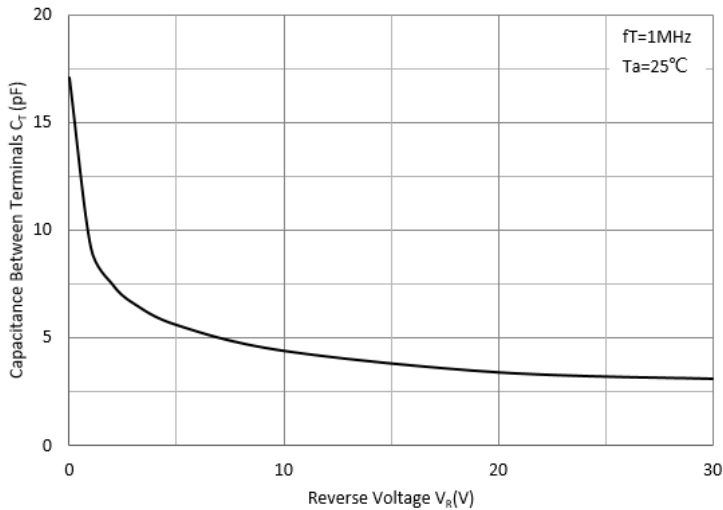
Forward Characteristics



Reverse Characteristics



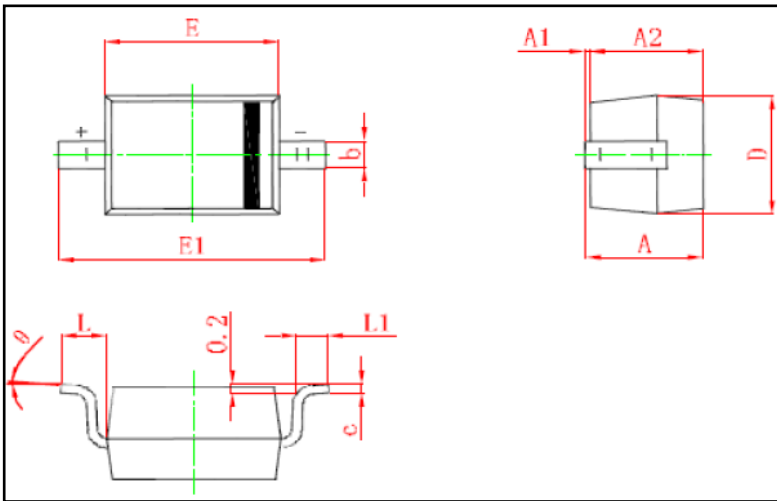
Capacitance Characteristics





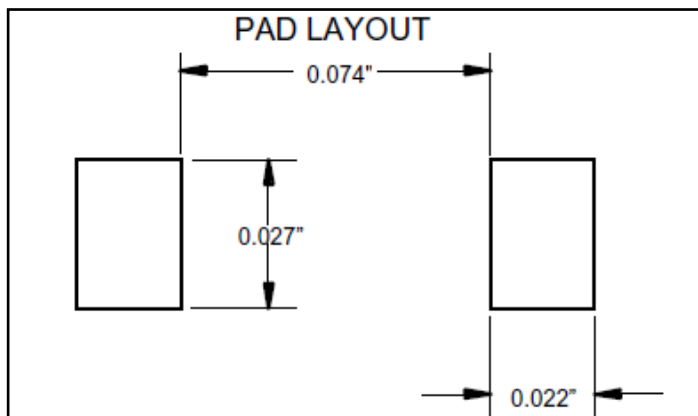
BAT46WS

■ SOD-323 Package Outline Dimensions



Symbol	Min. (mm)	Max. (mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.400
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°

■ SOD-323 Soldering Footprint



Unit: inches