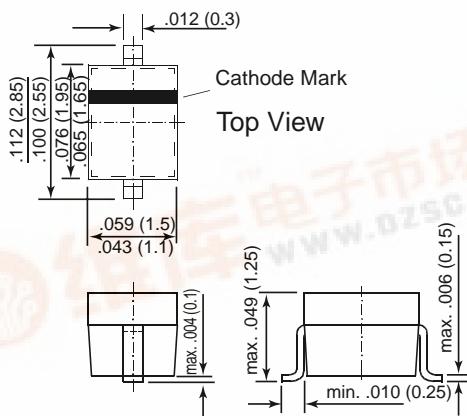


# SD104AWS THRU SD104CWS

## SCHOTTKY DIODES

### SOD-323



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Low turn-on voltage
- ◆ Low capacitance
- ◆ Ultrafast switching
- ◆ Microminiature plastic package
- ◆ Single, double, and ring balanced mixer in narrow-band receivers up to 1 GHz
- ◆ Detectors and fast switching up to 1 GHz
- ◆ Phase detectors
- ◆ Suitable for radios, TV, CTV, and hyper band tuners



### MECHANICAL DATA

Case: SOD-323 Plastic Package

Weight: approx. 0.004g

### MAXIMUM RATINGS AND THERMAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	SD104AWS	VR	20	Volts
	SD104BWS	VR	15	Volts
	SD104CWS	VR	10	Volts
Forward Current		IF	30	mA
Power Dissipation Tc= 25°C		Ptot	150 (NOTE 1)	mW
Junction Temperature		Tj	125	°C
Storage Temperature Range		Ts	-55 to + 150	°C
Thermal Resistance Junction to Ambient Air		RθJA	650 (NOTE 1)	K/W

#### NOTES:

(1) Valid provided that electrodes are kept at ambient temperature

# SD104AWS THRU SD104CWS

## ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		SYMBOL	MIN.	TYP.	MAX.	UNIT
Reverse Breakdown Voltage at $I_R = 10 \mu A$	SD104AWS	$V_R$	20	-	-	Volts
	SD104BWS	$V_R$	15	-	-	Volts
	SD104CWS	$V_R$	10	-	-	Volts
Leakage Current at $V_R = 15 V$ at $V_R = 10 V$ at $V_R = 5 V$	SD104AWS	$I_R$	-	-	500	nA
	SD104BWS	$I_R$	-	-	500	nA
	SD104CWS	$I_R$	-	-	500	nA
Forward Voltage at $I_F = 0.1 mA$  at $I_F = 1.0 mA$  at $I_F = 10 mA$	SD104AWS	$V_F$	-	-	350	mV
	SD104BWS	$V_F$	-	-	325	mV
	SD104CWS	$V_F$	-	-	310	mV
	SD104AWS	$V_F$	-	-	450	mV
	SD104BWS	$V_F$	-	-	425	mV
	SD104CWS	$V_F$	-	-	400	mV
Diodes Capacitance at $V_R = 0 V, f = 1 MHz$	SD104AWS	$C_D$	-	-	0.8	pF
	SD104BWS	$C_D$	-	-	0.9	pF
	SD104CWS	$C_D$	-	-	1.0	pF

### NOTES:

(1) Valid provided that electrodes are kept at ambient temperature