

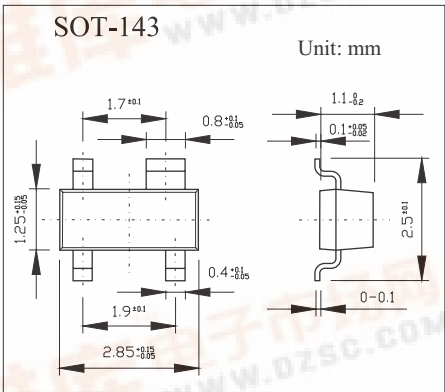
SMD Type

Diodes

Silicon Dual Schottky Diode
BAT14-099

■ Features

- DBS mixer application to 12 GHz
- Low noise figure
- Medium barrier type



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Reverse voltage	V_R	4	V
Forward current	I_F	90	mA
Power dissipation, $T_s \leq 55^\circ\text{C}$	P_{tot}	100	mW
Storage temperature range	T_{stg}	-55 to +150	$^\circ\text{C}$
Operating temperature range	T_{op}	-55 to +150	$^\circ\text{C}$
Junction - ambient ¹⁾	$R_{th JA}$	≤ 580	K/W
Junction - soldering point	$R_{th JS}$	≤ 340	K/W

Note

1.Package mounted on alumina 15 mm×16.7 mm to×0.7 mm.

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Breakdown voltage	V_{BR}	$I_R = 5 \mu\text{A}$	4			V
Forward voltage	V_F	$I_F = 1 \text{ mA}$		0.43		V
		$I_F = 10 \text{ mA}$		0.55		
Forward voltage matching	ΔV_F	$I_F = 10 \text{ mA}$			10	mV
Diode capacitance	C_T	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$			0.35	pF
Forward resistance	R_F	$I_F = 10 \text{ mA} / 50 \text{ mA}$		5.5		Ω

■ Marking

Marking	S9
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