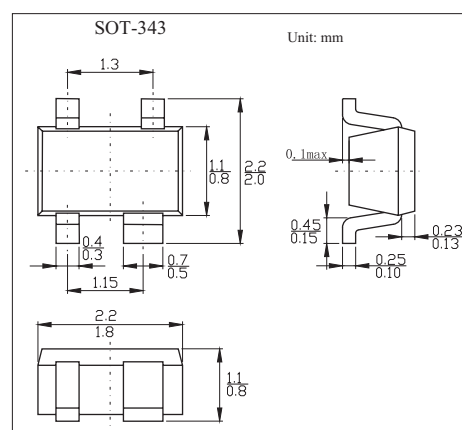


Silicon RF Switching Diode

BAR81W

■ Features

- Design for use in shunt configuration
- High shunt signal isolation
- Low shunt insertion loss

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

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	30	V
Forward current	I_F	100	mA
Total power dissipation, $T_s = 103^\circ\text{C}$	P_{tot}	100	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Operating temperature range	T_{op}	-55 to + 125	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to + 150	$^\circ\text{C}$
Junction - ambient ¹⁾	$R_{th JA}$	≤ 200	K/W
Junction - soldering point	$R_{th JS}$	≤ 120	K/W

Note

1. Package mounted on alumina $15\text{mm} \times 16.7\text{mm} \times 0.7\text{mm}$

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

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse current	I_R	$V_R = 20\text{ V}$			20	nA
Forward voltage	V_F	$I_F = 100\text{ mA}$		0.93	1	V
Diode capacitance	C_T	$V_R = 1\text{ V}, f = 1\text{ MHz}$		0.6		pF
		$V_R = 3\text{ V}, f = 1\text{ MHz}$		0.57		
Forward resistance	r_f	$I_F = 5\text{ mA}, f = 100\text{ MHz}$		0.7		Ω
Series inductance	t_{rr}			0.15		nH

■ Marking

Marking	BBs
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