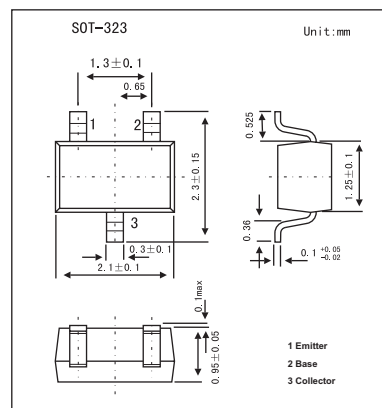


# BF824W

### ■ Features

- Low current (max. 25 mA).
- Low voltage (max. 30 V).



### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CB0</sub>	-30	V
Collector-emitter voltage	V <sub>CEO</sub>	-30	V
Emitter-base voltage	V <sub>EB0</sub>	-4	V
Collector current	I <sub>C</sub>	-25	mA
Peak collector current	I <sub>CM</sub>	-25	mA
Total power dissipation *	P <sub>tot</sub>	200	mW
Storage temperature	T <sub>stg</sub>	-65 to +150	°C
Junction temperature	T <sub>j</sub>	150	°C
Operating ambient temperature	R <sub>amb</sub>	-65 to +150	°C
Thermal resistance from junction to ambient *	R <sub>th j-a</sub>	625	K/W

\* Transistor mounted on an FR4 printed-circuit board.

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I <sub>CBO</sub>	I <sub>E</sub> = 0; V <sub>CB</sub> = -30 V			-50	nA
		I <sub>E</sub> = 0; V <sub>CB</sub> = -30 V; T <sub>j</sub> = 150 °C			-10	µA
Emitter cutoff current	I <sub>EBO</sub>	I <sub>C</sub> = 0; V <sub>EB</sub> = -4 V			-100	nA
DC current gain	h <sub>FE</sub>	I <sub>C</sub> = -1 mA; V <sub>CE</sub> = -10 V	25			
		I <sub>C</sub> = -4 mA; V <sub>CE</sub> = -10 V	25			
Base to emitter voltage	V <sub>BE</sub>	I <sub>C</sub> = -4 mA; V <sub>CE</sub> = -10 V			-900	mV
Feedback capacitance	C <sub>rb</sub>	I <sub>C</sub> = 0; V <sub>CE</sub> = -10 V; f = 1 MHz			0.3	pF
Transition frequency	f <sub>t</sub>	V <sub>CE</sub> = -10 V; f = 100 MHz;	250			MHz
		I <sub>C</sub> = -1 mA	400			
		I <sub>C</sub> = -4 mA				
		I <sub>C</sub> = -8 mA	390			

### ■ Marking

Marking	F8
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