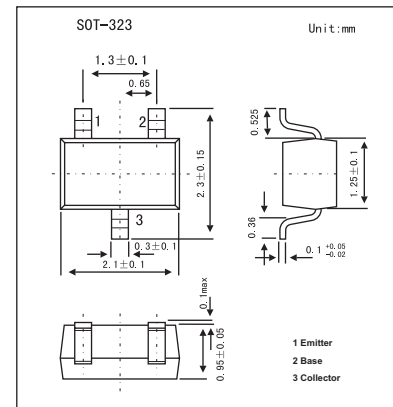


## PNP Medium Frequency Transistor

## BF824W

## ■ Features

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

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	-30	V
Collector-emitter voltage	$V_{CEO}$	-30	V
Emitter-base voltage	$V_{EBO}$	-4	V
Collector current	$I_C$	-25	mA
Peak collector current	$I_{CM}$	-25	mA
Total power dissipation *	$P_{tot}$	200	mW
Storage temperature	$T_{stg}$	-65 to +150	$^\circ\text{C}$
Junction temperature	$T_j$	150	$^\circ\text{C}$
Operating ambient temperature	$R_{amb}$	-65 to +150	$^\circ\text{C}$
Thermal resistance from junction to ambient *	$R_{th\ j-a}$	625	K/W

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

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit	
Collector cutoff current	$I_{CBO}$	$I_E = 0; V_{CB} = -30\text{ V}$			-50	nA	
		$I_E = 0; V_{CB} = -30\text{ V}; T_j = 150\text{ }^\circ\text{C}$			-10	$\mu\text{A}$	
Emitter cutoff current	$I_{EBO}$	$I_C = 0; V_{EB} = -4\text{ V}$			-100	nA	
DC current gain	$h_{FE}$	$I_C = -1\text{ mA}; V_{CE} = -10\text{ V}$	25				
		$I_C = -4\text{ mA}; V_{CE} = -10\text{ V}$	25				
Base to emitter voltage	$V_{BE}$	$I_C = -4\text{ mA}; V_{CE} = -10\text{ V}$			-900	mV	
Feedback capacitance	$C_{rb}$	$I_C = 0; V_{CE} = -10\text{ V}; f = 1\text{ MHz}$			0.3	pF	
Transition frequency	$f_t$	$V_{CE} = -10\text{ V}; f = 100\text{ MHz};$	250			MHz	
		$I_C = -1\text{ mA}$	400				
		$I_C = -4\text{ mA}$					
		$I_C = -8\text{ mA}$	390				

## ■ Marking

Marking	F8
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