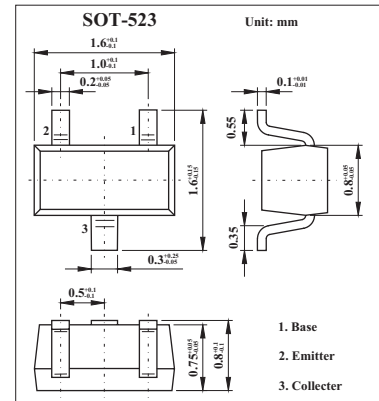


## Low Frequency Transistor

### 2SA2018

#### ■ Features

- A collector current is large
- Collector saturation voltage is low.  $V_{CE(sat)} \leq 250\text{mA}$   
at  $I_C=200\text{mA}/I_B=10\text{mA}$



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	15	V
Collector-emitter voltage	$V_{CE0}$	12	V
Collector current	$I_C$	500	mA
	$I_{CP}^*$	1	A
Collector power dissipation	$P_C$	150	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

\* Single pulse,  $P_w=1\text{ms}$

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{CB0}$	$I_C=10\ \mu\text{A}$	15			V
Collector-emitter breakdown voltage	$V_{CE0}$	$I_C=1\text{mA}$	12			V
Emitter-base breakdown voltage	$V_{EB0}$	$I_E=10\ \mu\text{A}$	6			V
Collector cutoff current	$I_{CBO}$	$V_{CB}=15\text{V}$			100	nA
DC current gain	$h_{FE}$	$V_{CE}=2\text{V}, I_C=10\text{mA}$	270		680	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C/I_B=200\text{mA}/10\text{mA}$		100	250	mV
Output capacitance	$C_{ob}$	$V_{CB}=10\text{V}, I_E=0\text{A}, f=1\text{MHz}$		6.5		pF
Transition frequency	$f_T$	$V_{CE}=2\text{V}, I_E=10\text{mA}, f=100\text{MHz}$		260		MHz

#### ■ Marking

Marking	BW
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