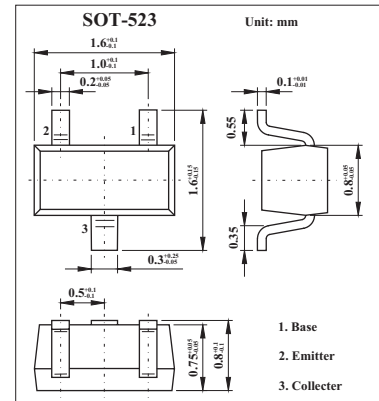


Low Frequency Transistor

2SA2018

■ Features

- A collector current is large
- Collector saturation voltage is low. $V_{CE(sat)} \leq 250\text{mV}$
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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