



2SB1274/2SD1913

60V/3A Low-Frequency Power Amplifier Applications

Applications

- General power amplifier.

Features

- Wide ASO (Adoption of MBIT process).
- Low saturation voltage.
- High reliability.
- High breakdown voltage.
- Micaless package facilitating mounting.

Specifications

(): 2SB1274

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		(-)60	V
Collector-to-Emitter Voltage	V_{CEO}		(-)60	V
Emitter-to-Base Voltage	V_{EBO}		(-)6	V
Collector Current	I_C		(-)3	A
Collector Current (Pulse)	I_{CP}		(-)8	A
Collector Dissipation	P_C	$T_c=25^\circ\text{C}$	2	W
			20	W
Junction Temperature	T_J		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

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

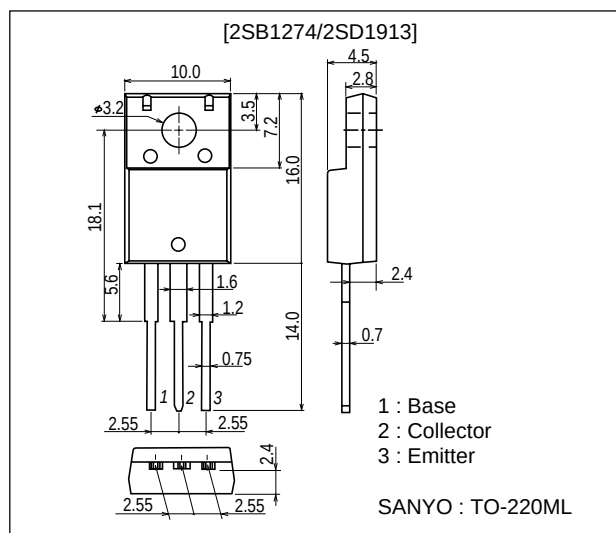
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)40\text{V}, I_E=0$			(-)100	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)4\text{V}, I_C=0$			(-)100	μA

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Package Dimensions

unit : mm

2041A



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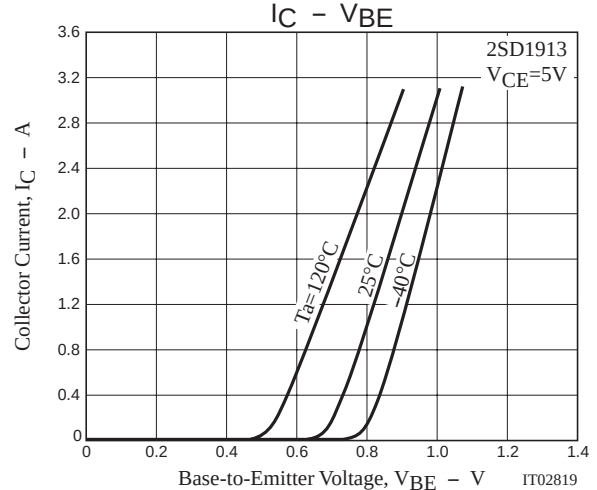
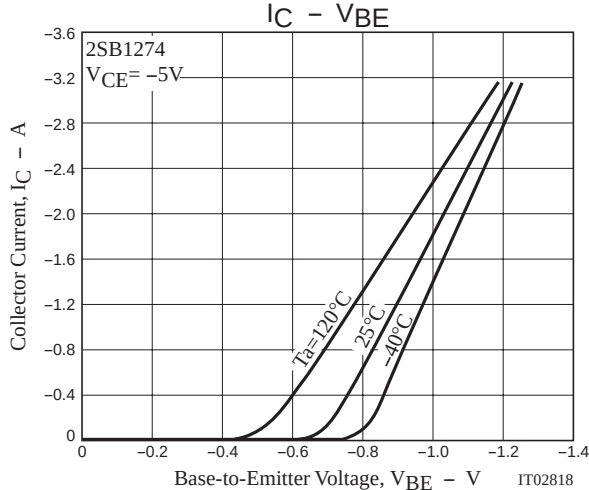
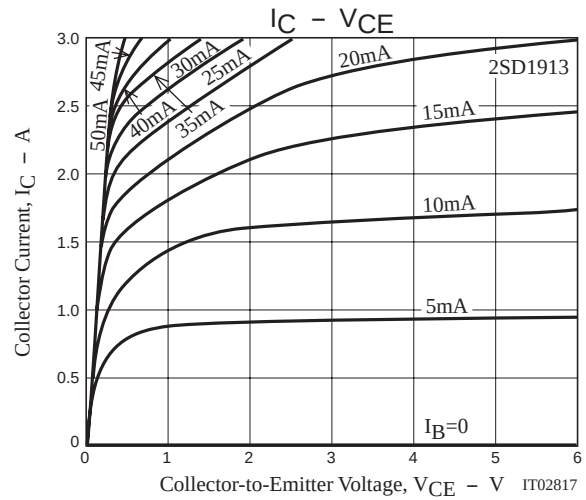
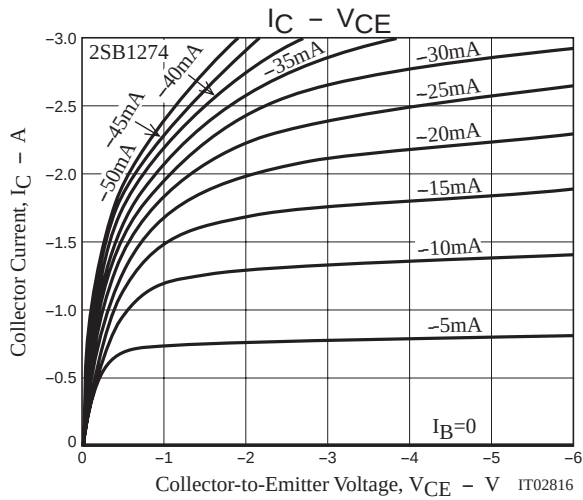
2SB1274/2SD1913

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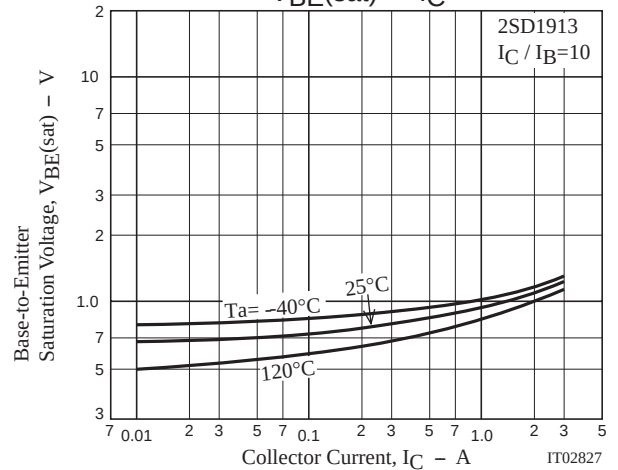
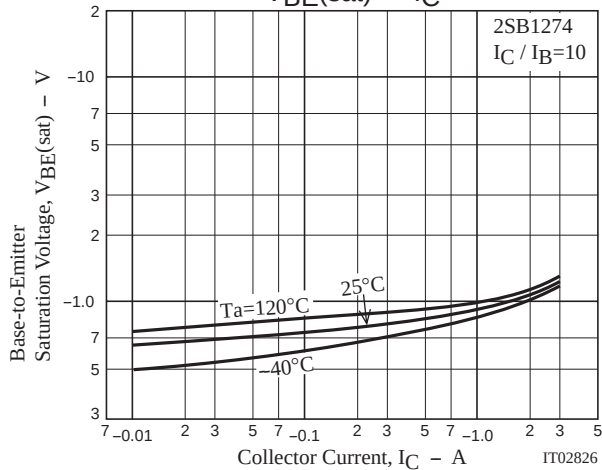
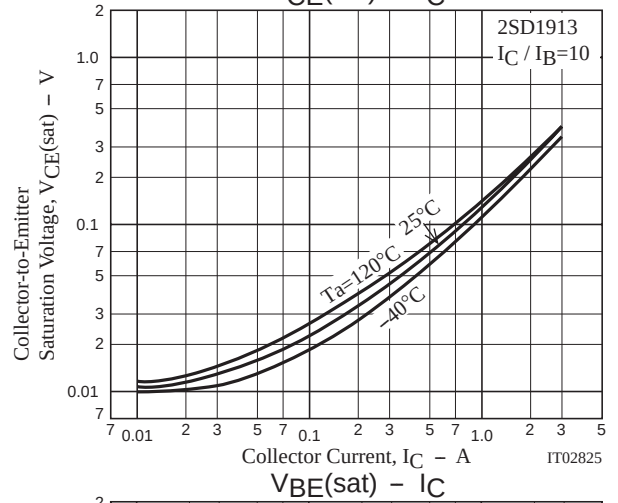
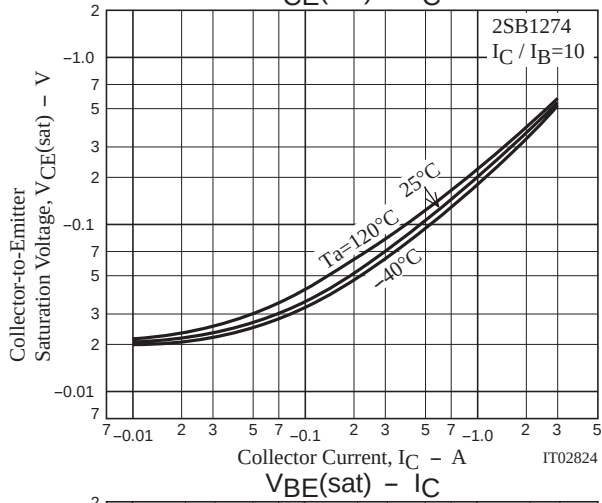
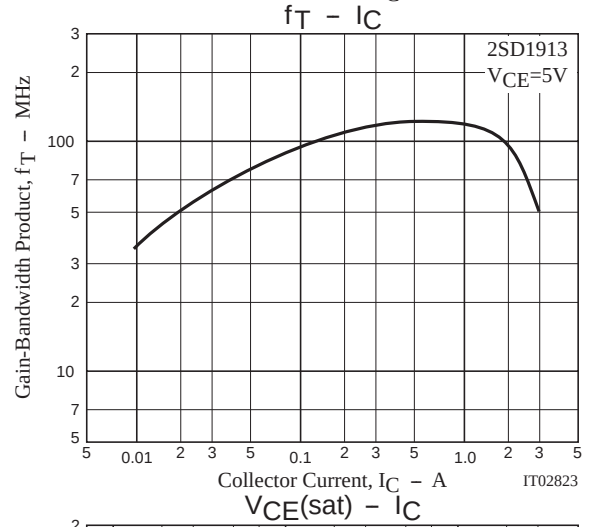
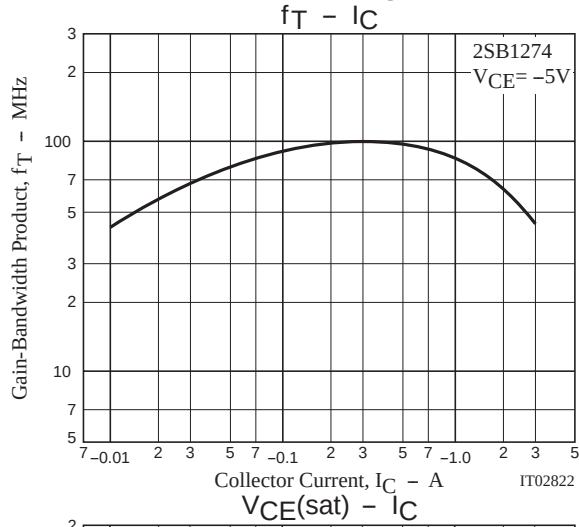
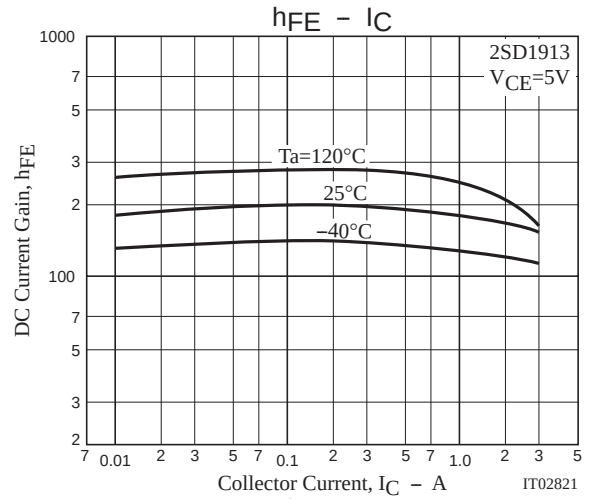
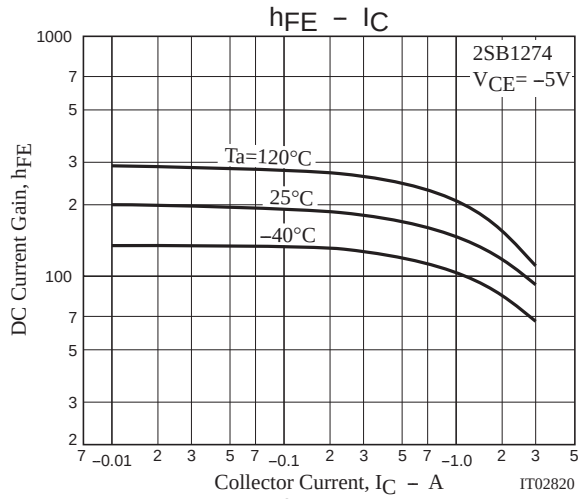
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
DC Current Gain	h_{FE1}	$V_{CE}=(-)5V, I_C=(-)0.5A$	70*		280*	
	h_{FE2}	$V_{CE}=(-)5V, I_C=(-)3A$	20			
Gain-Bandwidth Product	f_T	$V_{CE}=(-)5V, I_C=(-)0.5A$		100		MHz
Output Capacitance	C_{ob}	$V_{CB}=(-)10V, f=1MHz$		(60)40		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)2A, I_B=(-)0.2A$		(-)0.4	(-)1	V
Base-to-Emitter Voltage	V_{BE}	$V_{CE}=(-)5V, I_C=(-)0.5A$		(-)0.8	(-)1	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)1mA, I_E=0$	(-)60			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=5mA, R_{BE}=\infty$	(-)60			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)1mA, I_C=0$	(-)6			V

* : The 2SBB1274 / 2SD1913 are classified by 0.5A h_{FE} as follows :

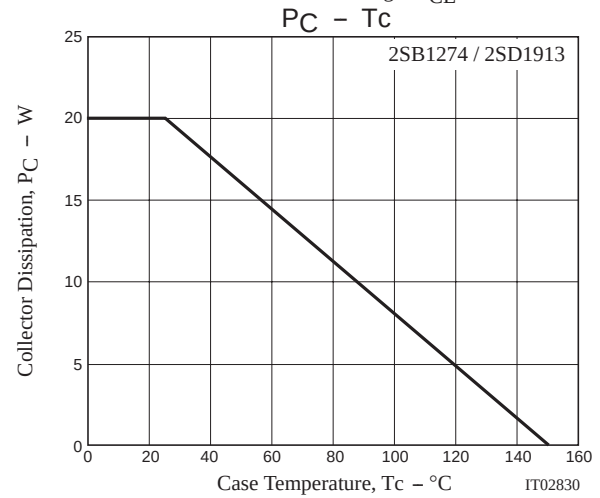
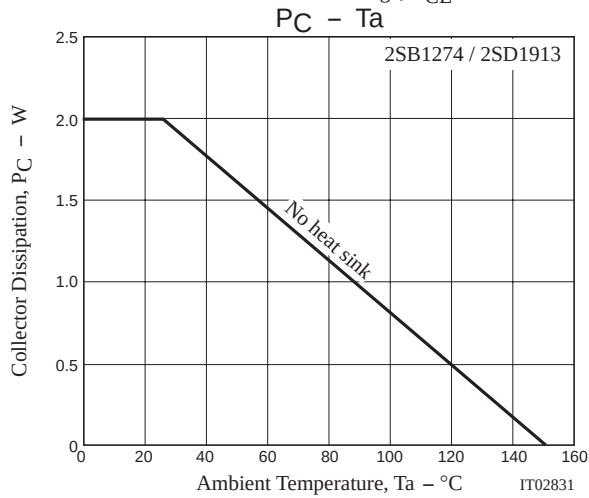
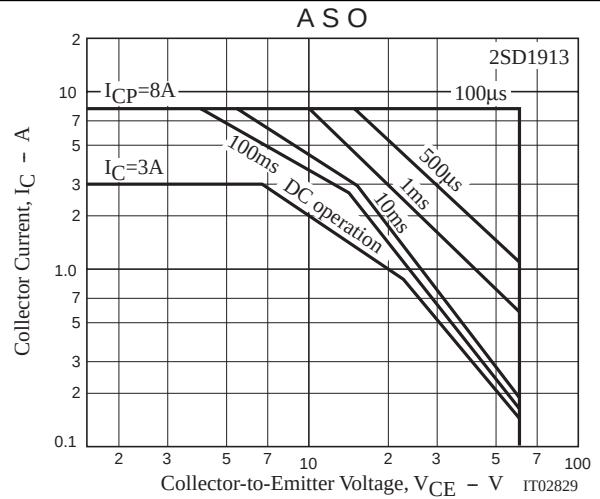
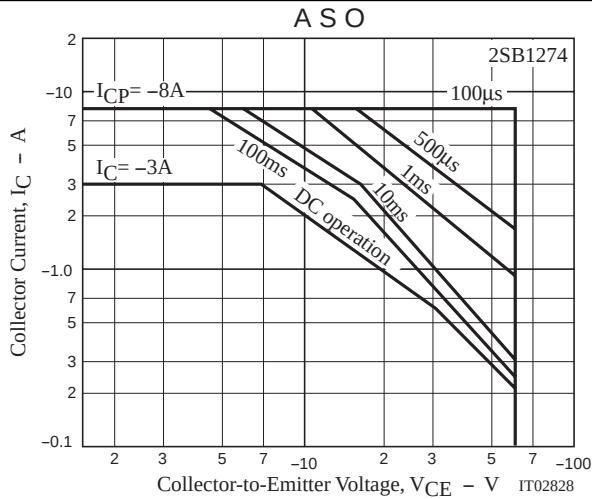
Rank	Q	R	S
h_{FE}	70 to 140	100 to 200	140 to 280



2SB1274/2SD1913



2SB1274/2SD1913



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