Ordering number : ENN1854A

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DATA SHEET

NPN Epitaxial Planar Silicon Transistors

2SC3661 — High hFE, Low-Frequency General-Purpose Amplifier Applications

Applications

· Low frequency general-purpose amplifiers, drivers, muting circuit.

Features

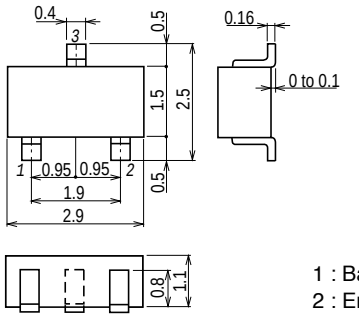
· Ultrasmall-sized package permitting 2SC3661-used sets to be made smaller, slimmer.
· Adoption of FBET process.
· High DC current gain (h_{FE}=800 to 3200).
· Low collector-to-emitter saturation voltage ($V_{CE(sat)}$≤0.5V).
· High V_{EBO} (V_{EBO}≥15V).

Package Dimensions

unit:mm

2018B

[2SC3661]



1 : Base
2 : Emitter
3 : Collector
SANYO : CP

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		30	V
Collector-to-Emitter Voltage	V_{CEO}		25	V
Emitter-to-Base Voltage	V_{EBO}		15	V
Collector Current	I_C		300	mA
Collector Current (Pulse)	I_{CP}		500	mA
Collector Dissipation	P_C		200	mW
Junction Temperature	Tj		125	˚C
Storage Temperature	Tstg		–55 to +125	˚C

Electrical Characteristics at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	V_{CB}=20V, I_E=0			0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=10V, I_C=0			0.1	μA
DC Current Gain	h_{FE}	V_{CE}=5V, I_C=10mA	800	1500	3200	
Gain-Bandwidth Product	f_T	V_{CE}=10V, I_C=10mA		250		MHz
Output Capacitance	C_{ob}	V_{CB}=10V, f=1MHz		2.7		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=200mA, I_B=4mA		0.12	0.5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=200mA, I_B=4mA		0.85	1.2	V

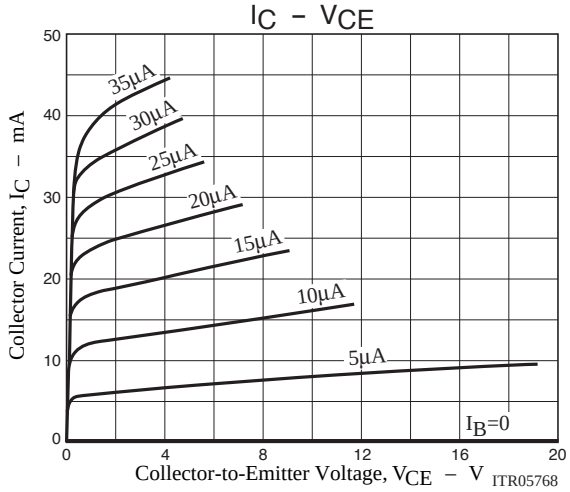
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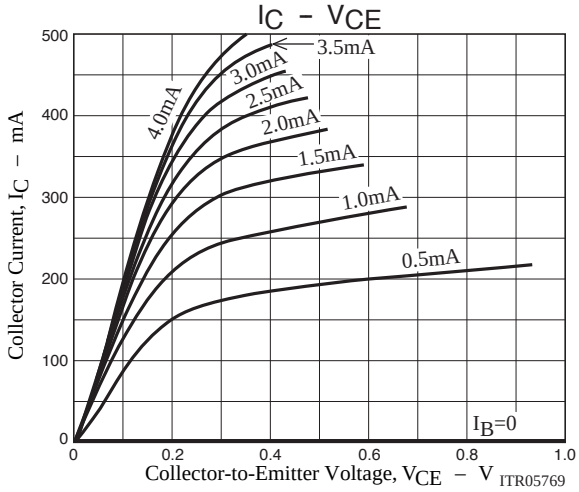
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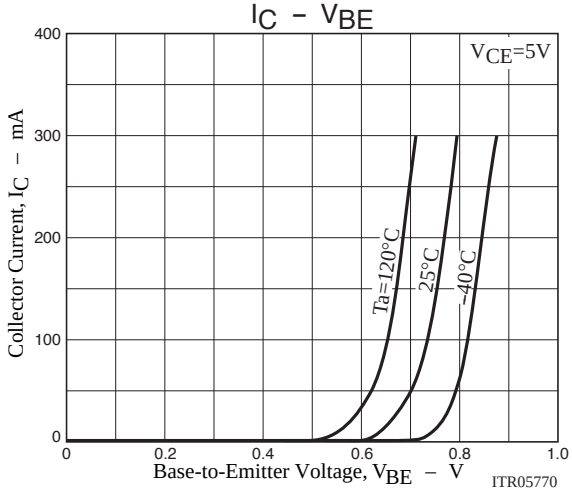
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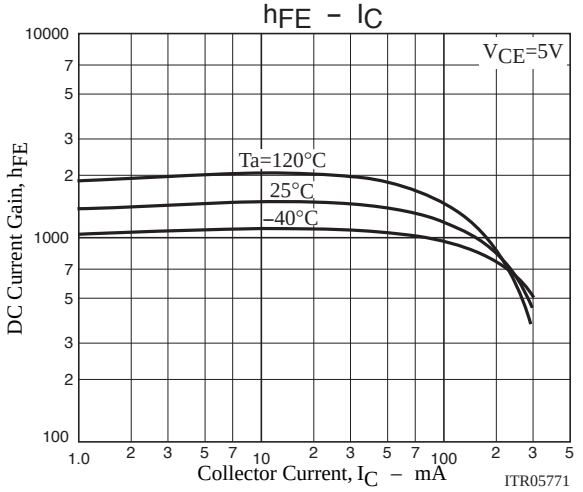
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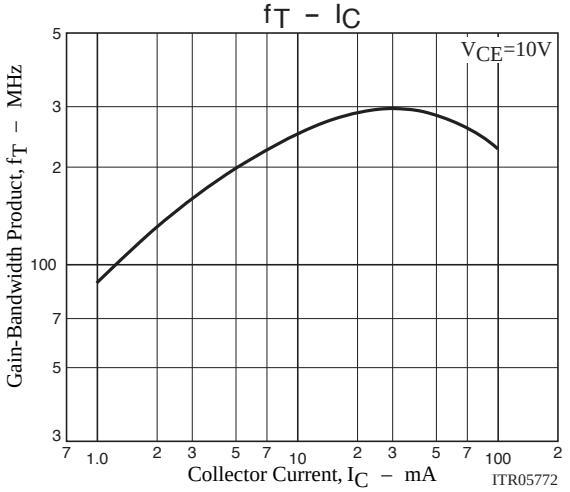
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=10μA, I_E=0	30			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA, I_B=0	25			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=10μA, I_C=0	15			V

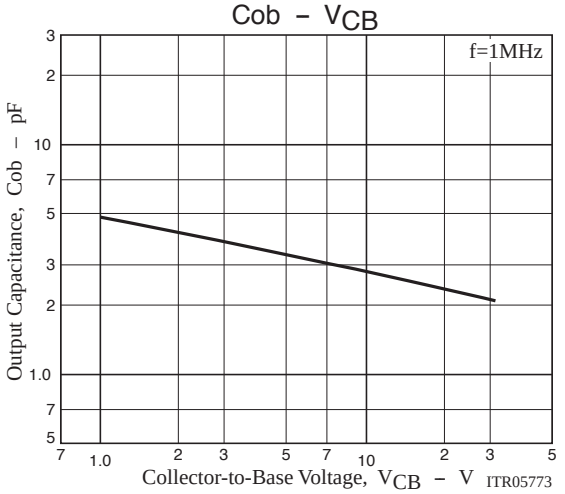


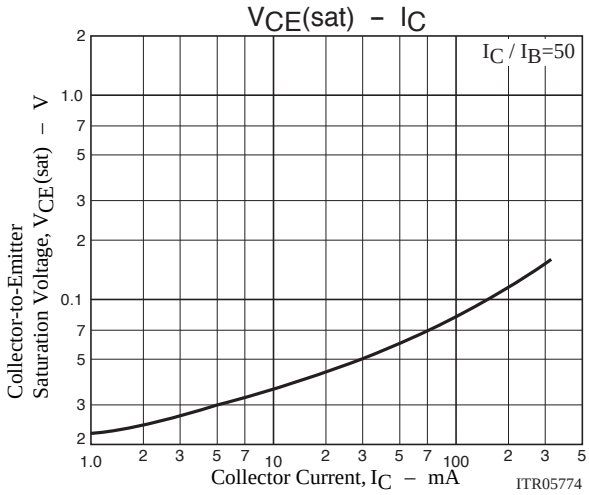


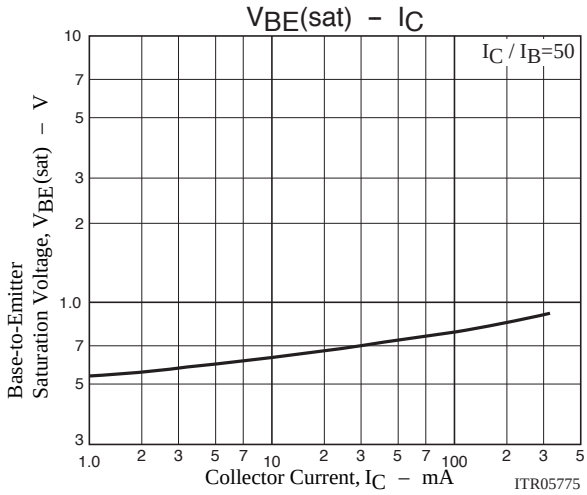


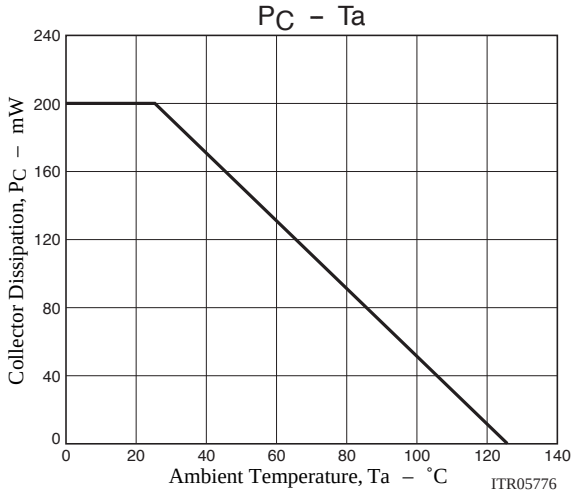












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