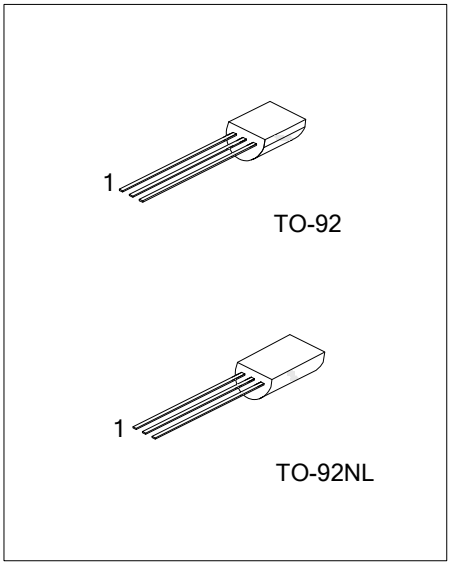
2SB562

PNP EPITAXIAL SILICON TRANSISTOR

LOW FREQUENCY POWER AMPLIFIER



■ FEATURES

* Low frequency power amplifier
* Complement to 2SD468

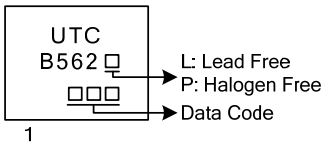
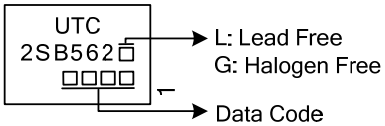
■ ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SB562L-x-T92-B	2SB562G-x-T92-B	TO-92	E	C	B	Tape Box
2SB562L-x-T92-K	2SB562G-x-T92-K	TO-92	E	C	B	Bulk
2SB562L-x-T9N-B	2SB562G-x-T9N-B	TO-92NL	E	C	B	Tape Box
2SB562L-x-T9N-K	2SB562G-x-T9N-K	TO-92NL	E	C	B	Bulk

Note: Pin Assignment: E: Emitter C: Collector B: Base

2SB562L-x-T92-R (1)Packing Type (2)Package Type (3)Rank (4)Green Package	(1) B: Tape Box, K: Bulk (2) T92: TO-92, T9N: TO-92NL (3) x: refer to Classification of h_{FE} (4) L: Lead Free, G: Halogen Free and Lead Free

■ MARKING

TO-92	TO-92NL
	

■ ABSOLUTE MAXIMUM RATING (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	-25	V
Collector-Emitter Voltage	V_{CEO}	-20	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	Ic	-1	A
Collector Peak Current	I_C (peak)	-1.5	A
Collector Power Dissipation	P_C	0.9	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=-10μA, I_E=0	-25			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-1mA, R_{BE}=∞	-20			V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=-10μA, I_C=0	-5			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-20V, I_E=0			-1	μA
DC Current Transfer Ratio	h_{FE}	V_{CE}=-2V, I_C=-0.5A (note)	85		240	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-0.8A, I_B=-0.08A (note)		-0.2	-0.5	V
Base to Emitter Voltage	V_{BE}	V_{CE}=-2V, I_C=-0.5A (note)		-0.8	-1.0	V
Gain Bandwidth Product	f_T	V_{CE}=-2V, I_C=-0.5A (note)		350		MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz		38		pF

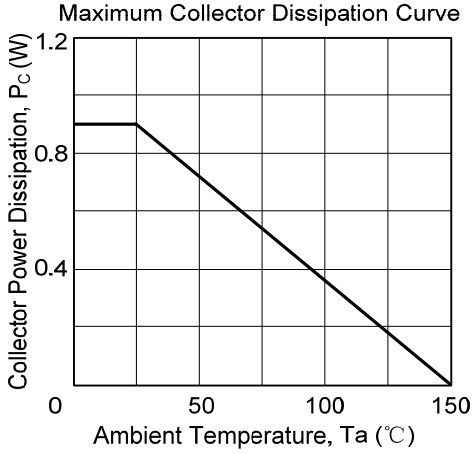
Note 1: Pulse test

■ CLASSIFICATION OF hFE

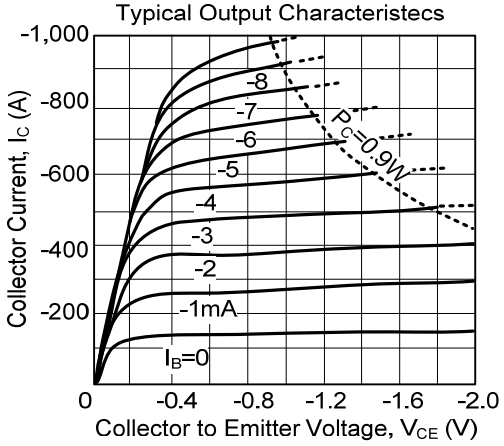
RANK	B	C
RANGE	85 - 170	120 - 240

■ TYPICAL CHARACTERISTICS

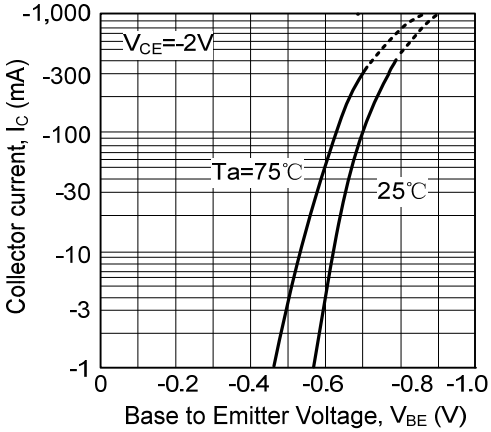
Maximum Collector Dissipation Curve



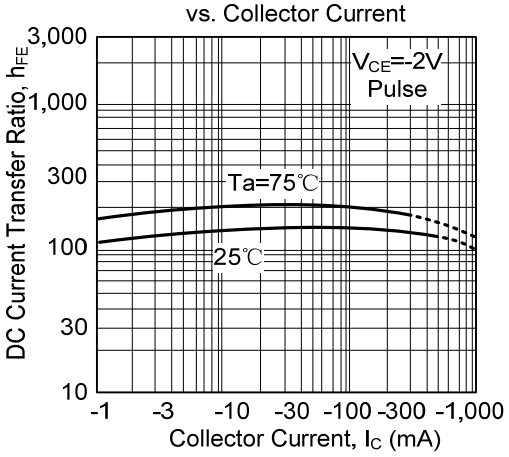
Typical Output Characteristecs



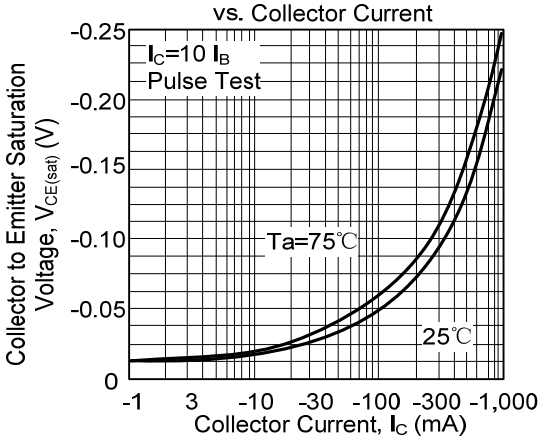
Typical Transfer Characteristics



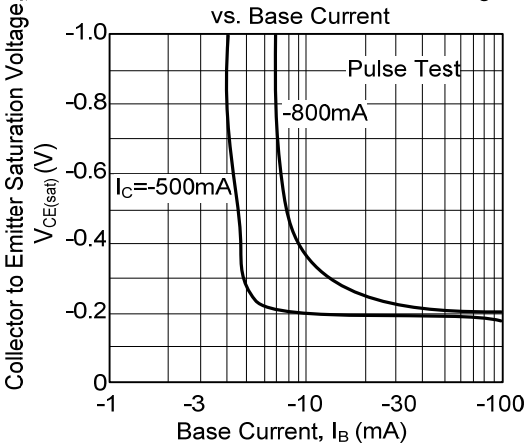
DC Current Transfer Ratio vs. Collector Current



Collector to Emitter Saturation Voltage vs. Collector Current



Collector to Emitter Saturation Voltage vs. Base Current



■ TYPICAL CHARACTERISTICS

Collector Output Capacitance vs. Collector to Base Voltage