



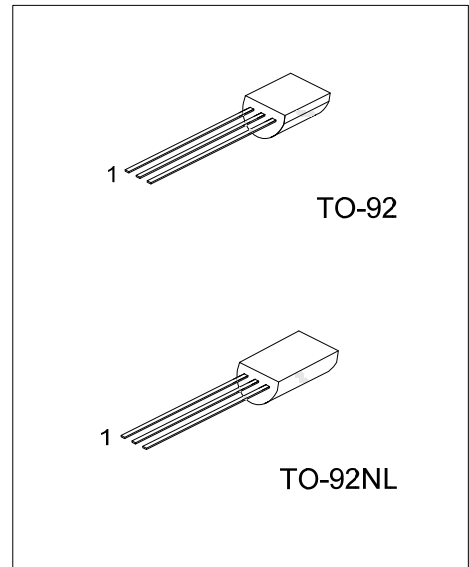
# 2SA928A

## PNP SILICON TRANSISTOR

### AUDIO POWER AMPLIFIER

■ FEATURES

- \* Collector Dissipation  $P_C=1$  W
- \* 3 W Output Application
- \* Complement of 2SC2328A



■ ORDERING INFORMATION

Ordering Number			Package	Pin Assignment			Packing
Normal	Lead Free	Halogen Free		1	2	3	
2SA928A-x-T92-B	2SA928AL-x-T92-B	2SA928AG-x-T92-B	TO-92	E	C	B	Tape Box
2SA928A-x-T92-K	2SA928AL-x-T92-K	2SA928AG-x-T92-K	TO-92	E	C	B	Bulk
2SA928A-x-T9N-B	2SA928AL-x-T9N-B	2SA928AG-x-T9N-B	TO-92NL	E	C	B	Tape Box
2SA928A-x-T9N-K	2SA928AL-x-T9N-K	2SA928AG-x-T9N-K	TO-92NL	E	C	B	Bulk

<p>2SA928AL-x-T92-B</p> <p>(1)Packing Type (2)Package Type (3)Rank (4)Lead Plating</p>	<p>(1) B: Tape Box, K: Bulk (2) T92:TO-92, T9N: TO-92NL (3) x: refer to Classification of <math>h_{FE}</math> (4) G: Halogen Free, L: Lead Free, Blank: Pb/Sn</p>
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■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector- Base Voltage	$V_{CBO}$	-30	V
Collector-Emitter Voltage	$V_{CEO}$	-30	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-2	A
Collector Dissipation	$P_C$	1	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.

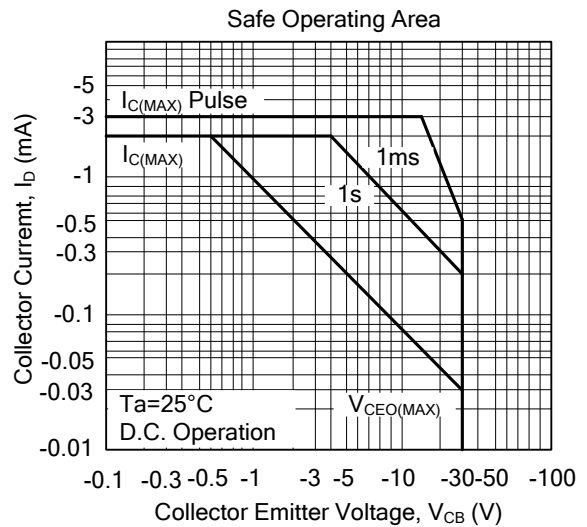
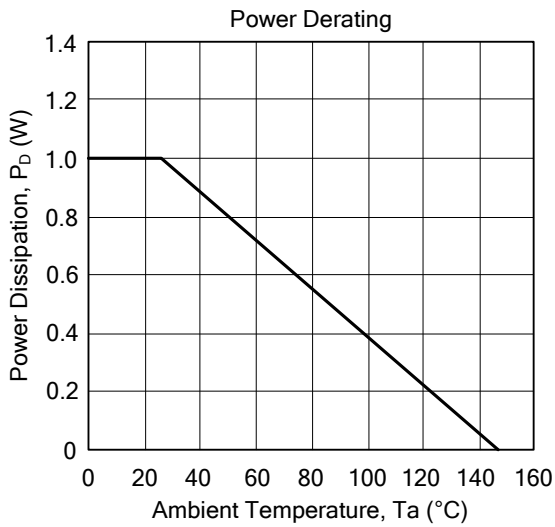
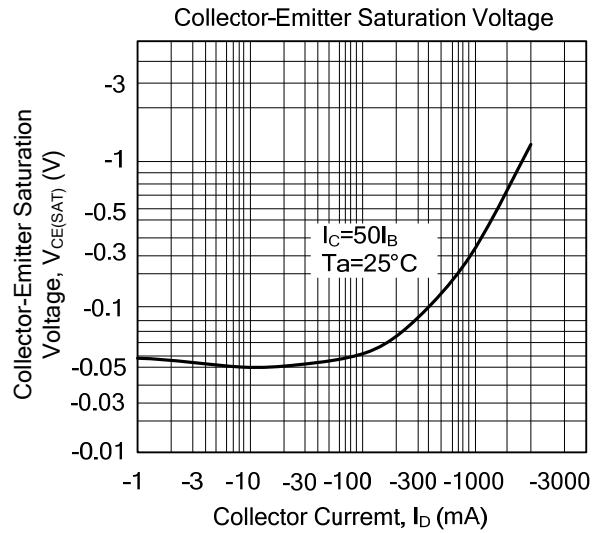
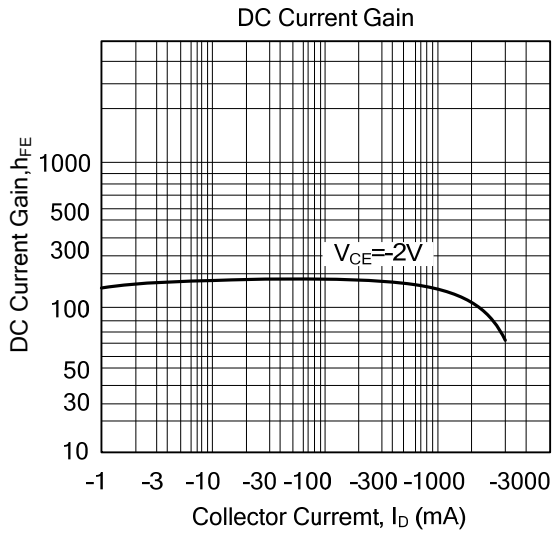
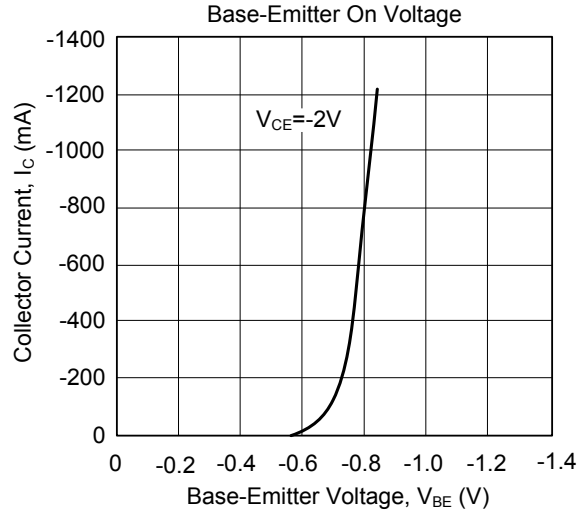
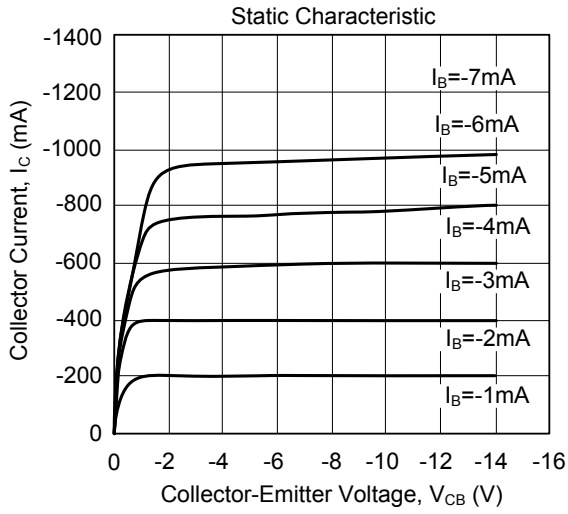
■ ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C = -100\mu A, I_E = 0$	-30			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C = -1mA, I_B = 0$	-30			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E = -1mA, I_C = 0$	-5			V
Collect Cut-off Current	$I_{CBO}$	$V_{CB} = -30V, I_E = 0$			-100	nA
Emitter Cut-off Current	$I_{EBO}$	$V_{BE} = -5V, I_C = 0$			-100	nA
DC Current Ratio	$h_{FE}$	$V_{CE} = -2V, I_C = -500mA$	100		320	
Base-Emitter on Voltage	$V_{BE(ON)}$	$V_{CE} = -2V, I_C = -500mA$			-1	V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = -1.5A, I_B = -30mA$			-2	V
Output Capacitance	$C_{OB}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$		48		pF
Current Gain Bandwidth Product	$f_T$	$V_{CE} = -2V, I_C = -500mA$		120		MHz

■ CLASSIFICATION OF  $h_{FE}$

RANK	Q	Y
RANGE	100 ~ 200	160 ~ 320

## TYPICAL CHARACTERISTICS



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