

SILICON TRANSISTORS 2SA1221, 1222

PNP SILICON EPITAXIAL TRANSISTOR FOR LOW-FREQUENCY POWER AMPLIFIERS

FEATURES

- Ideal for use of high withstanding voltage current such as TV vertical deflection output, audio output, and variable power supplies.
- Complementary transistor with 2SC2958 and 2SC2959

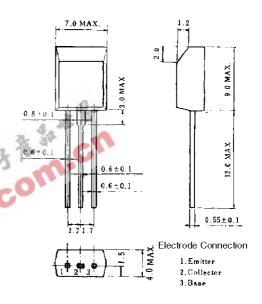
VCEO = 140 V: 2SA1221/2SC2958 VCEO = 160 V: 2SA1222/2SC2959

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	Vcво	-160	V
Collector to emitter voltage	Vceo	-140/-160	V
Emitter to base voltage	V _{EBO}	-5.0	V
Collector current (DC)	Ic(DC)	-500	mA
Collector current (pulse)	C(pulse)*	-1.0	Α
Total power dissipation	Рт	1.0	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

^{*} PW \leq 10 ms, duty cycle \leq 50%

PACKAGE DRAWING (UNIT: mm)



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Collector cutoff current	Ісво	Vcb = -100 V, IE = 0			-200	nA
Emitter cutoff current	ІЕВО	V _{EB} = -5.0 V, I _C = 0			-200	nA
DC current gain	hfe **	$V_{CE} = -2.0 \text{ V, Ic} = -100 \text{ mA}$	100	150	400	
DC base voltage	V _{BE} **	$V_{CE} = -5.0 \text{ V}, \text{ Ic} = -20 \text{ mA}$	-0.6	-0.64	-0.7	V
Collector saturation voltage	V _{CE(sat)} **	Ic = -1.0 A, IB = -0.2 A		-0.6	-0.9	V
Base saturation voltage	V _{BE(sat)} **	Ic = -1.0 A, IB = -0.2 A		-1.1	-0.3	V
Output capacitance	Сор	V _{CB} = −10 V, I _E = 0, f = 1.0 MHz		24	40	pF
Gain bandwidth product	f⊤	Vce = -10 V, Ie = 20 mA	30	45		MHz

^{**} Pulse test PW \leq 350 $\mu s,$ duty cycle \leq 2% per pulsed

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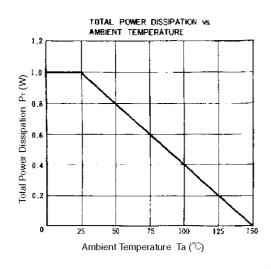
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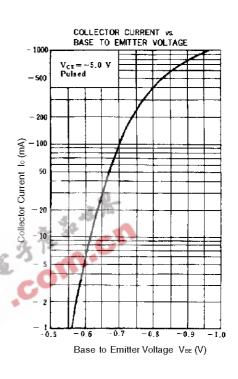


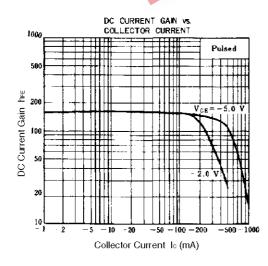
hfe CLASSIFICATION

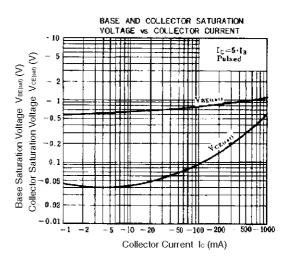
Marking	M	L	К	
hfE	100 to 200	160 to 320	200 to 400	

TYPICAL CHARACTERISTICS (Ta = 25°C)

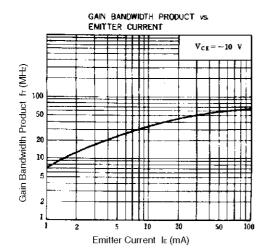


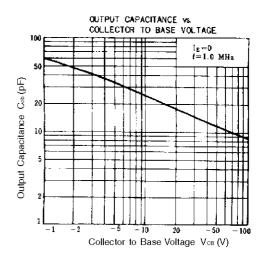






2SA1221, 1222







NEC 2SA1221, 1222

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