TOSHIBA 2SC4210

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2 S C 4 2 1 0

AUDIO POWER AMPLIFIER APPLICATIONS

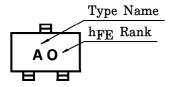
High DC Current Gain : $h_{FE} = 100 \sim 320$

Complementary to 2SA1621

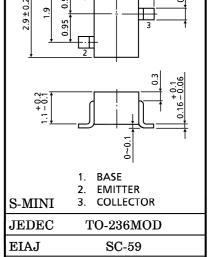
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CBO}	35	V
Collector-Emitter Voltage	v_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	IC	800	mA
Base Current	$I_{\mathbf{B}}$	160	mA
Collector Power Dissipation	PC	200	mW
Junction Temperature	Tj	150	$^{\circ}\mathrm{C}$
Storage Temperature Range	$T_{ m stg}$	-55~150	$^{\circ}\mathrm{C}$

MARKING



Unit in mm



2-3F1A

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ELECTRICAL CHARACTERISTICS ($Ta = 25^{\circ}C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 35 \text{ V}, I_{E} = 0$	_	_	0.1	μ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB} = 5 V, I_{C} = 0$	_	_	0.1	μ A
Collector-Emitter Breakdown Voltage	V _(BR) CEO	$I_{\rm C} = 10 {\rm mA}, \; I_{\rm B} = 0$	30	_	_	V
DC Current Gain	hFE (1) (Note)	$ m V_{CE}=1V,I_{C}=100mA$	100	_	320	
	h _{FE} (2)	$V_{CE} = 1 \text{ V}, I_{C} = 700 \text{ mA}$	35	_	_	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_{\rm C} = 500 {\rm mA}, \; I_{\rm B} = 20 {\rm mA}$	_	_	0.5	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{CE} = 1 \text{ V}, I_{C} = 10 \text{ mA}$	0.5	_	0.8	V
Transition Frequency	$ m f_{T}$	$V_{CE} = 5 \text{ V}, I_{C} = 10 \text{ mA}$	_	120	_	MHz
Collector Output Capacitance	$C_{ m ob}$	$V_{CB} = 10 \text{ V}, \text{ I}_{E} = 0, \text{ f} = 1 \text{ MHz}$	_	13	_	рF

(Note): hFE(1) Classification $O: 100\sim200, Y: 160\sim320$

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