TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2 S A 1 6 2 1

AUDIO POWER AMPLIFIER APPLICATIONS

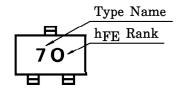
High $h_{FE}: h_{FE} = 100 \sim 320$

Complementary to 2SC4210

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	$V_{ m EBO}$	-5	V
Collector Current	$I_{\mathbf{C}}$	-800	mA
Base Current	$I_{\mathbf{B}}$	-160	mA
Collector Power Dissipation	$P_{\mathbf{C}}$	200	mW
Junction Temperature	T_{j}	150	°C
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~150	°C

Marking



Unit in mm

2.5 - 0.3 + 0.25 + 0.25 + 0.15 + 0.15 2.5 - 0.15 2.5 - 0.15 3 3 1			
1. BASE 2. EMITTER 3. COLLECTOR			
S-MINI			
JEDEC TO-236MOD			
EIAJ SC-59			

2-3F1A

Weight: 0.012g

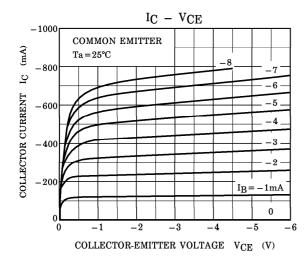
TOSHIBA

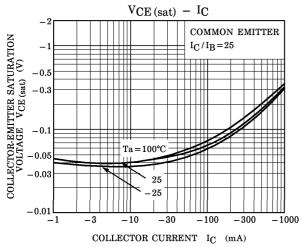
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

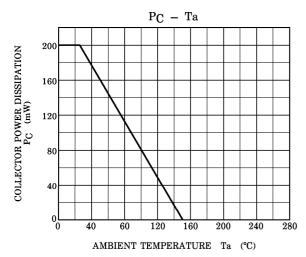
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I _{CBO}	$V_{CB} = -35V, I_{E} = 0$	_	_	-0.1	μ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB} = -5V, I_C = 0$	_	_	-0.1	μ A
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{C} = -10 \text{mA}, I_{B} = 0$	-30	_	_	V
DC Current Gain	h _{FE (1)} (Note)	$V_{CE} = -1V, I_{C} = -100 \text{mA}$	100	_	320	
	h _{FE} (2)	$V_{CE} = -1V, I_{C} = -700 \text{mA}$	35	_	_	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_C = -500 \text{mA}, I_B = -20 \text{mA}$	_	_	-0.7	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{CE} = -1V, I_{C} = -10mA$	-0.5	_	-0.8	V
Transition Frequency	f_{T}	$V_{CE} = -5V, I_{C} = -10mA$	_	120	_	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$	_	19	_	pF

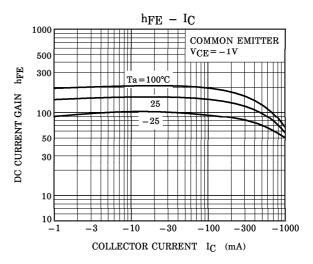
Note: hFE(1) Classification O: 100~200 Y: 160~320

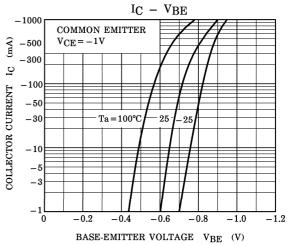
2001-05-31











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