TOSHIBA 2SA1163

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2 S A 1 1 6

AUDIO FREQUENCY GENERAL PURPOSE AMPLIFIER APPLICATIONS.

High Voltage: $V_{CEO} = -120V$

Excellent hee Linearity

: $h_{FE} (I_C = -0.1 mA) / h_{FE} (I_C = -2 mA) = 0.95 (Typ.)$

High hFE $h_{FE} = 200 \sim 700$

Low Noise : NF = 1dB (Typ.), 10dB (Max.)

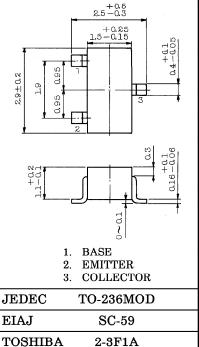
Complementary to 2SC2713

Small Package

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CBO}	-120	V
Collector-Emitter Voltage	v_{CEO}	-120	V
Emitter-Base Voltage	$V_{ m EBO}$	-5	V
Collector Current	$I_{\mathbf{C}}$	-100	mA
Base Current	$I_{\mathbf{B}}$	-20	mA
Collector Power Dissipation	$P_{\mathbf{C}}$	150	mW
Junction Temperature	T_{j}	125	°C
Storage Temperature Range	$\mathrm{T}_{\mathrm{stg}}$	-55~125	$^{\circ}\mathrm{C}$

Unit in mm



Weight: 0.012g

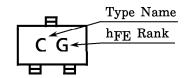
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -120V, I_E = 0$	_		-0.1	μ A
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$	_	_	-0.1	μ A
DC Current Gain	h _{FE} (Note)	$V_{CE} = -6V, I_{C} = -2mA$	200	_	700	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_C = -10 \text{mA}, I_B = -1 \text{mA}$		_	-0.3	V
Transition Frequency	${ m fT}$	$V_{CE} = -6V$, $I_{C} = -1mA$		100	_	MHz
Collector Output Capacitance	C _{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$	_	4	_	pF
Noise Figure	NF	V_{CE} = -6V, I_{C} = 0.1mA, f=1kHz, R_{g} = 10k Ω	_	1.0	10	dB

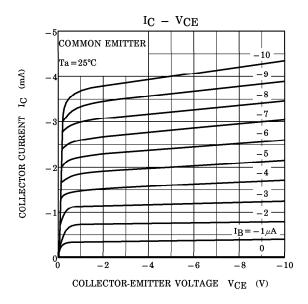
Note: hfe Classification GR(G): 200~400 BL(L): 350~700

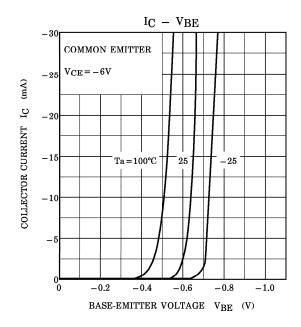
() Marking Symbol

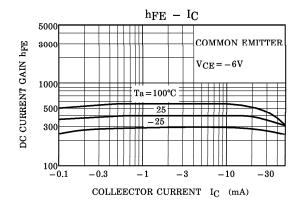
MARKING

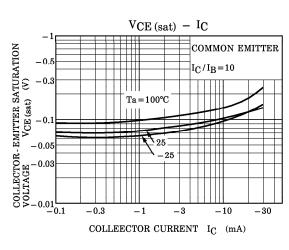


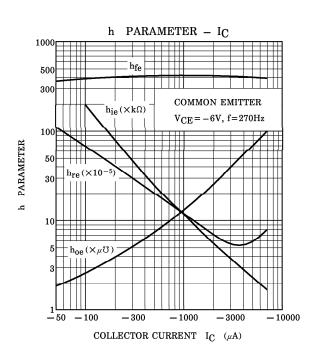
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