PRODUCT NAME : 2SA970 PNP Audio Amplifier Transistor (Pack of 5)

PRICE : Rs 20.00
SKU : RM2114

DESCRIPTION

Features

- Collector-Emitter Volt (Vceo): 120V
- Collector-Base Volt (Vcbo): 120V
- Collector Current (Ic): 0.1A
- hfe: 200-700 @ 2mA
- Power Dissipation (Ptot): 300mW
- Current-Gain-Bandwidth (ftotal): 100MHz
- Type: PNP

TOSHIBA 2SA970

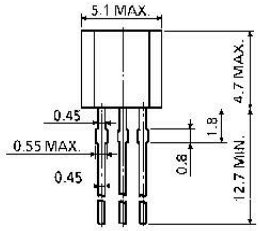
TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

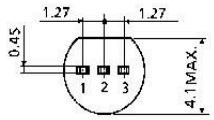
2SA970

LOW NOISE AUDIO AMPLIFIER APPLICATIONS

Unit in mm

- Low Noise
  : NF = 3dB (Typ.) R_G = 100Ω, V_{CE} = −6V, I_C = −100μA, f = 1kHz
  : NF = 0.5dB (Typ.) R_G = 1kΩ, V_{CE} = −6V, I_C = −100μA, f = 1kHz
- High DC Current Gain : h_{FE} = 200~700
- High Breakdown Voltage : V_{CEO} = −120V
- Low Pulse Noise. Low 1/f Noise





1. EMITTER
2. COLLECTOR
3. BASE

JEDEC	TO-92
EIAJ	SC-43
TOSHIBA	2-5F1B

Weight : 0.21g

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_{EBO}	−5	V
Collector Current	I_C	−100	mA
Base Current	I_B	−20	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	−55~125	°C

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	μA
Emitter Cut-off Current	I_{EBO}	V_{EB} = −5V, I_C = 0	—	—	−0.1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = −1mA, I_B = 0	−120	—	—	V
DC Current Gain	h_{FE} (Note)	V_{CE} = −6V, I_C = −2mA	200	—	700	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = −10mA, I_B = −1mA	—	—	−0.3	V
Base-Emitter Voltage	V_{BE}	V_{CE} = −6V, I_C = −2mA	—	0.65	—	V
Transition Frequency	f_T	V_{CE} = −6V, I_C = −1mA	—	100	—	MHz
Collector Output Capacitance	C_{ob}	V_{CB} = −10V, I_E = 0, f = 1MHz	—	4.0	—	pF
Noise Figure	NF	V_{CE} = −6V, I_C = −0.1mA, f = 10Hz, R_G = 10kΩ	—	—	6	dB
		V_{CE} = −6V, I_C = −0.1mA, f = 1kHz, R_G = 10kΩ	—	—	2	
		V_{CE} = −6V, I_C = −0.1mA, f = 1kHz, R_G = 100Ω	—	3	—	

Note : h_{FE} Classification GR : 200~400, BL : 350~700

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