

Si PNP TRANSISTOR

2SA763

EPOXY MOLDED, LOW NOISE AUDIO AMP.

2SA

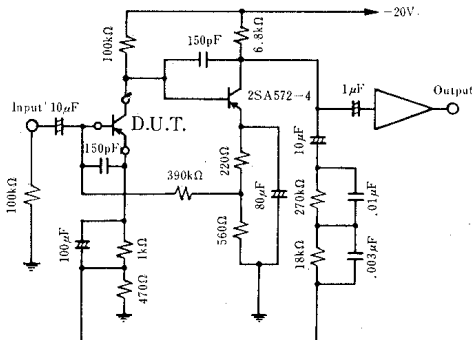
ABSOLUTE MAXIMUM RATINGS (Ta : 25°C)

	763-Y	763-W
COLLECTOR-BASE VOLTAGE	V_{CBO} -30	-60 V
COLLECTOR-EMITTER VOLTAGE	V_{CEO} -25	-50 V
EMITTER-BASE VOLTAGE	V_{EBO} -5	-5 V
COLLECTOR CURRENT	I_C -50	-50 mA
POWER DISSIPATION	P_C 200	200 mW
JUNCTION TEMPERATURE	T_J 125	125 °C
STORAGE TEMPERATURE	T_{stg} -55~+125	-55~+125 °C

ELECTRICAL CHARACTERISTICS (Ta : 25°C)

PARAMETER	SYM.	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
COLLECTOR CUTOFF CURRENT	I_{CBO}	$V_{CB} : -20V, I_E : 0$			-50	nA
STATIC FWD. CUR. TRANSFER RATIO	h_{FE}	$V_{CE} : -6V, I_C : -1mA, \text{NOTE 1}$	90		800	
TRANSITION FREQUENCY	f_T	$V_{CE} : -6V, I_E : 1mA$	80	120		MHz
COLLECTOR OUTPUT CAPACITANCE	C_{ob}	$V_{CB} : -6V, I_E : 0, f : 1MHz$		3	8	pF
BASE-COLLECTOR TIME CONSTANT	$C_{e'b'b}$	$V_{CB} : -6V, I_E : 1mA, f : 31.9MHz$		55	100	ps
COLLECTOR-EMITTER SATURATION VOLTAGE	$V_{CE(sat)}$	$I_C : -10mA, I_B : -1mA$			-0.3	V
BASE-EMITTER SATURATION VOLTAGE	$V_{BE(sat)}$	$I_C : -10mA, I_B : -1mA$			-1.0	V
NOISE FIGURE	NF_1	$V_{CE} : -6V, f_1 : 30Hz$		2		dB
	NF_2	$I_C : -0.1mA, f_2 : 1kHz$		0.7		dB
	NF_3	$R_g : 10k\Omega, f_3 : 10kHz$		0.5		dB
AVERAGE OUTPUT NOISE VOLTAGE	V_n	see below				
L-RANK				8	12	mV
N-RANK					24	mV

MEASURING CIRCUIT FOR NOISE VOLTAGE
(FREQUENCY CHARACTERISTIC : RIAA)



VOLTAGE GAIN 60dB AT 1kHz

NOTE 1 : ACCORDING TO THE VALUE OF h_{FE} , THE DEVICE IS CLASSIFIED AS FOLLOWS.

RANK 3 : 90~180

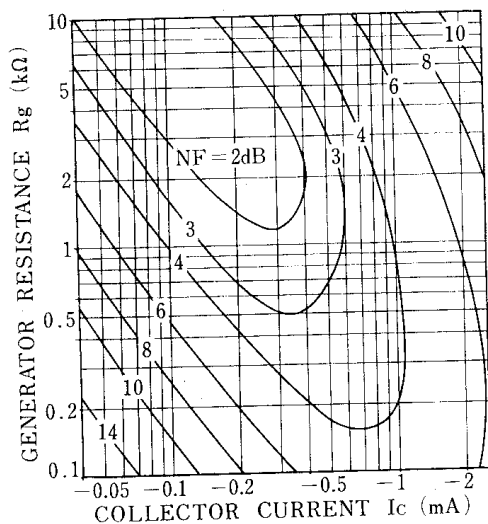
RANK 4 : 150~350

RANK 5 : 250~500

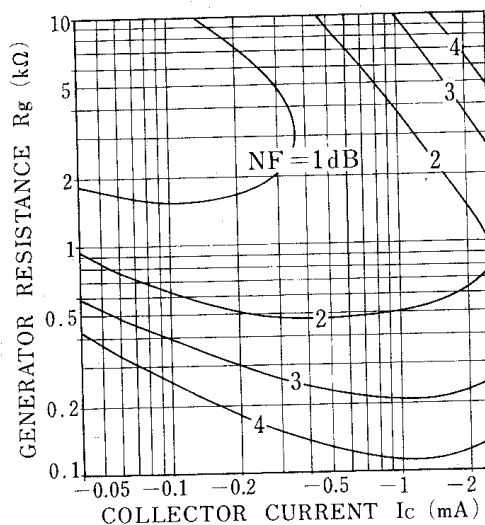
RANK 6 : 400~800

NOTE 2 : FOR COMPLEMENTARY CIRCUIT USING 763, PNP LOW NOISE TRANSISTOR TYPE 949 IS AVAILABLE FOR REQUEST.

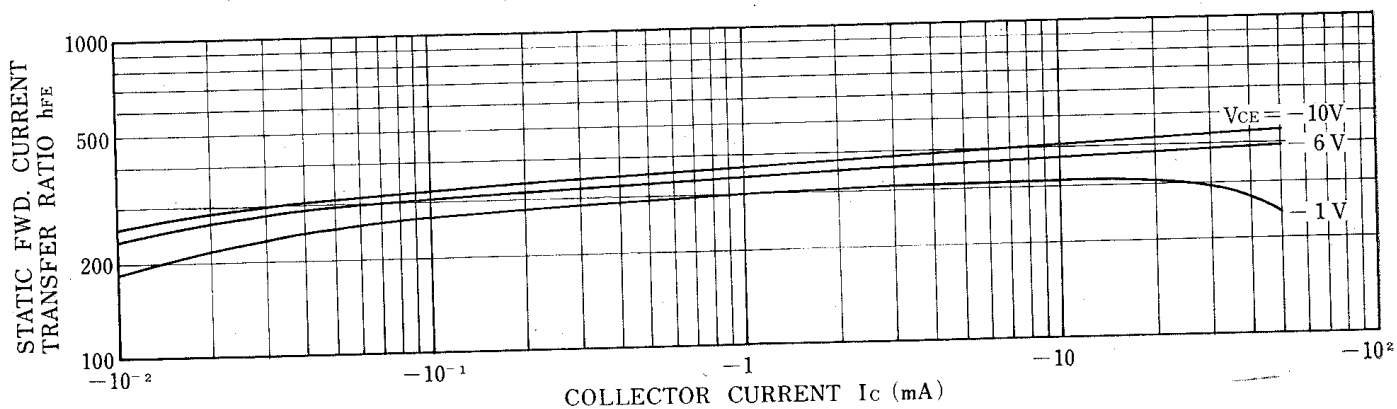
CONTOURS OF CONSTANT NF (1)
($T_a : 25^\circ\text{C}$, $V_{CE} : -6\text{V}$, $f : 30\text{Hz}$)



CONTOURS OF CONSTANT NF (2)
($T_a : 25^\circ\text{C}$, $V_{CE} : -6\text{V}$, $f : 1\text{kHz}$)



STATIC FWD. CURRENT TRANSFER RATIO vs. COLLECTOR CURRENT ($T_a : 25^\circ\text{C}$)



OUTLINE DRAWINGS OF NJRC's EPOXY MOLDED TRANSISTORS

(Unit : millimeter)

