

2SA

Si PNP TRANSISTOR

2SA763

EPOXY MOLDED, LOW NOISE AUDIO AMP.

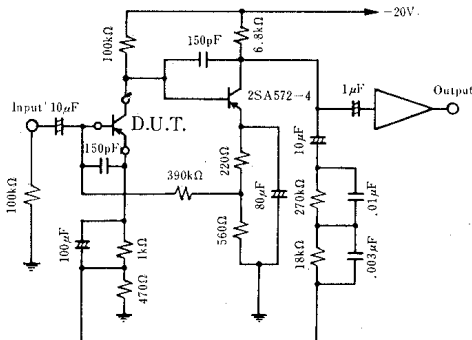
■ ABSOLUTE MAXIMUM RATINGS (Ta : 25°C)

		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 _B : 0			-50	nA
STATIC FWD. CUR. TRANSFER RATIO	h _{FE}	V _{CE} : -6V, I _C : -1mA, 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 COLLECTOR-EMITTER	C _{e_rb_'b}	V _{CB} : -6V, I _E : 1mA, f : 31.9MHz		55	100	ps
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	$\left. \begin{array}{l} V_{CE} : -6V \\ I_C : -0.1mA \\ R_g : 10k\Omega \end{array} \right\} \begin{array}{l} f_1 : 30Hz \\ f_2 : 1kHz \\ f_3 : 10kHz \end{array}$		2		dB
	NF ₂		0.7	dB		
	NF ₃		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)



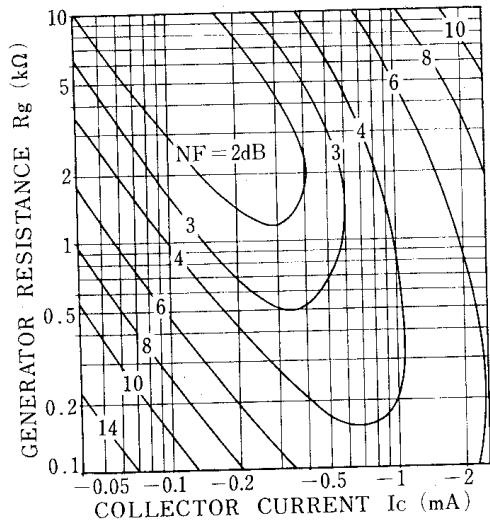
← VOLTAGE GAIN 60dB AT 1kHz →

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

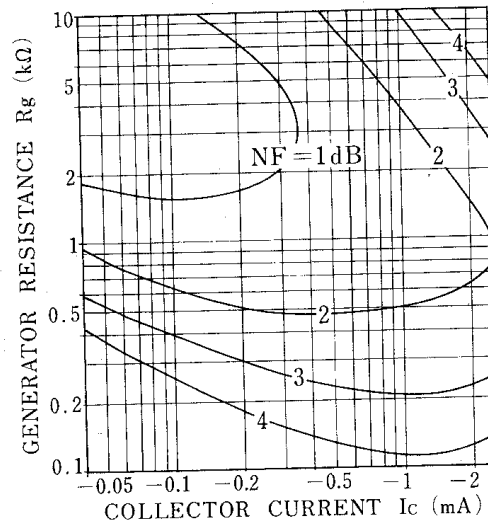
- RANK 3 : 90~180
- RANK 4 : 150~350
- RANK 5 : 250~500
- RANK 6 : 400~800

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

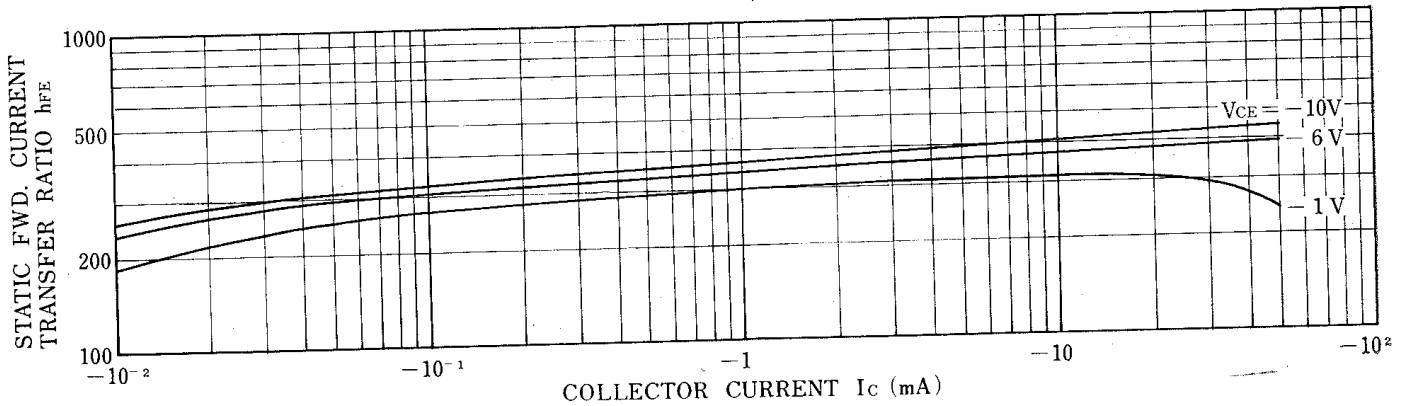
CONTOURS OF CONSTANT NF (1)
($T_a : 25^\circ\text{C}$, $V_{CE} : -6\text{V}$, $f : 30\text{Hz}$)



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)

