

Phase-out/Discontinued

μ PA75HA

DESCRIPTION

The μ PA75HA is designed for use in the top stage for differential amplifier of an EQ amp. and a stereo main amp.

FEATURES

- Excellent pair balance $\Delta V_{BE} : 5.0 \text{ mV MAX.}$
@ $V_{CE} = -6.0 \text{ V}, I_C = -1.0 \text{ mA}$
- High h_{FE} $h_{FE} : 400 \text{ TYP.}$
@ $V_{CE} = -6.0 \text{ V}, I_C = -1.0 \text{ mA}$
- High Breakdown Voltage $V_{CEO} : -80 \text{ V MIN.}$

ABSOLUTE MAXIMUM RATINGS

Maximum Temperatures

Storage Temperature -55 to $+125^\circ\text{C}$

Junction Temperature 125°C Maximum

Maximum Power Dissipation ($T_a = 25^\circ\text{C}$)

Total Power Dissipation 300 mW/unit

Maximum Voltages and Currents ($T_a = 25^\circ\text{C}$)

V_{CBO} Collector to Base Voltage -80 V

V_{CEO} Collector to Emitter Voltage . . . -80 V

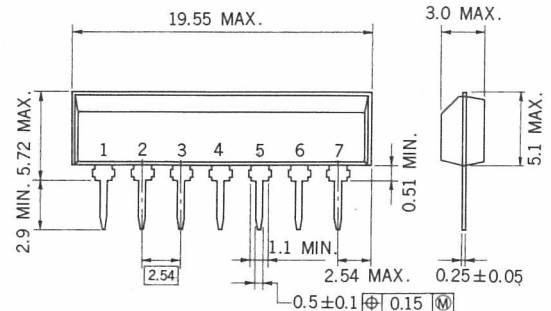
V_{EBO} Emitter to Base Voltage -5.0 V

I_C Collector Current -50 mA

I_B Base Current -10 mA

PACKAGE DIMENSIONS

in millimeters (inches)



1. Base 1
2. Collector 1
3. Emitter 1
4. Sub
5. Emitter 2
6. Collector 2
7. Base 2

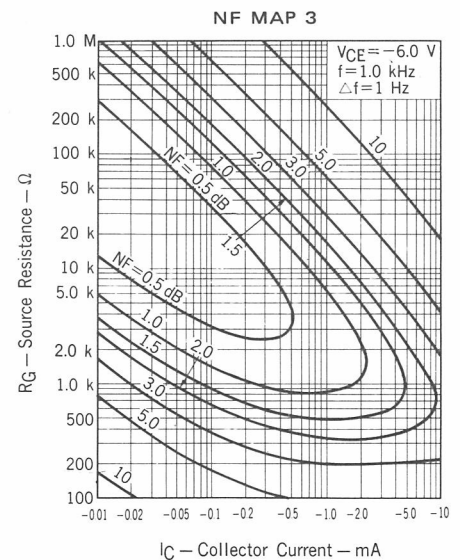
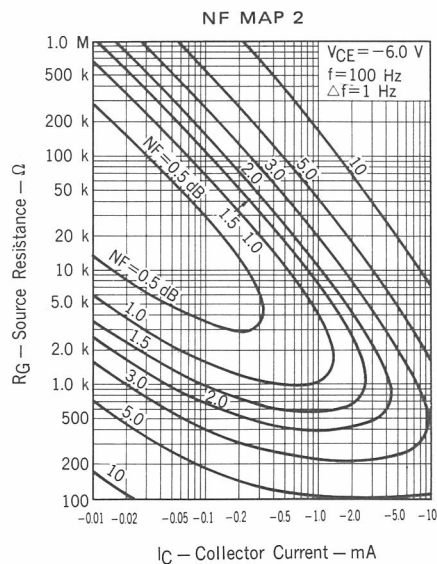
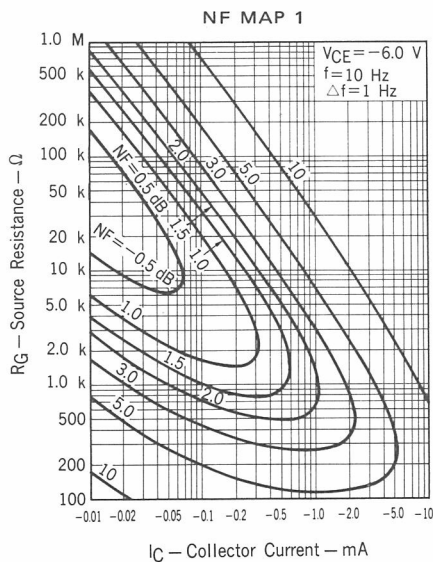
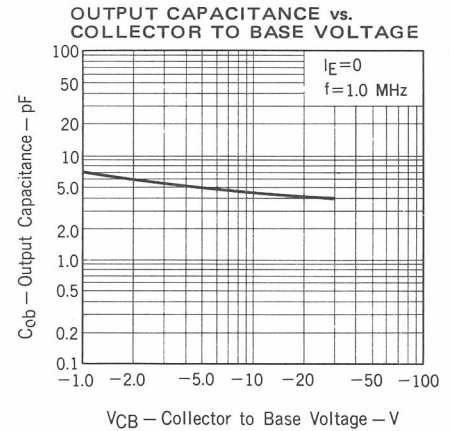
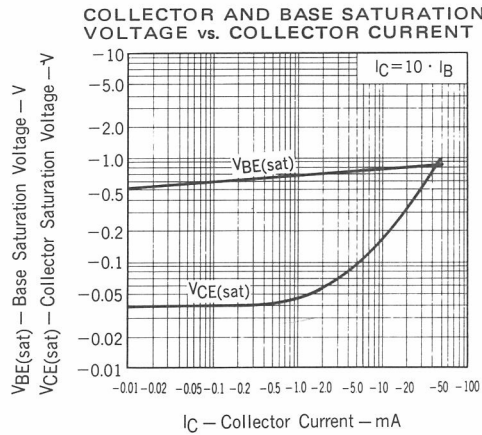
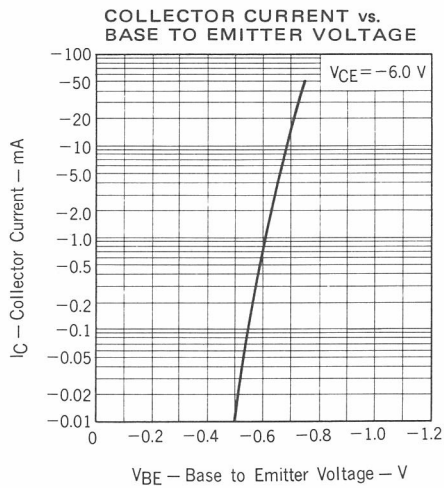
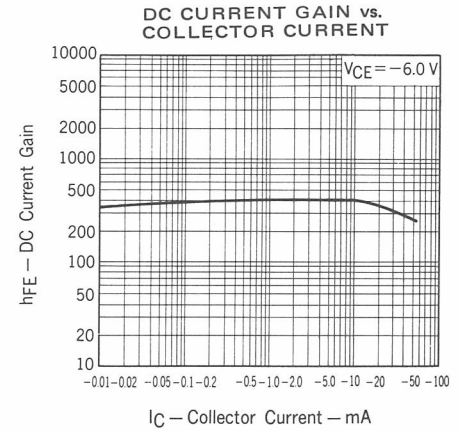
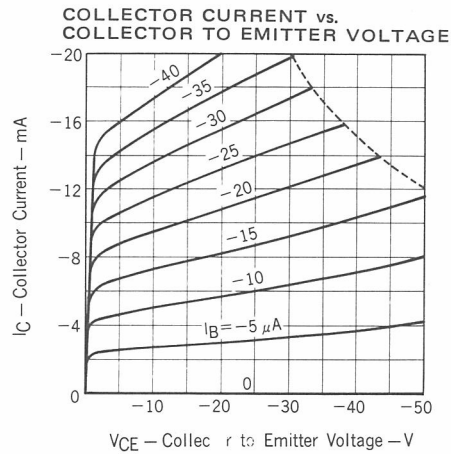
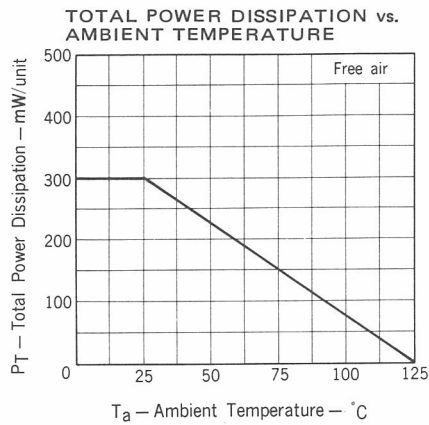
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

SYMBOL	CHARACTERISTIC	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
h_{FE1}	DC Current Gain	150	350			$V_{CE} = -6.0 \text{ V}, I_C = -0.1 \text{ mA}$
h_{FE2}	DC Current Gain	200	400	800		$V_{CE} = -6.0 \text{ V}, I_C = -0.1 \text{ mA}$
$h_{FE(S)}/h_{FE(L)}$	DC Current Gain Ratio	0.9		1.0		$V_{CE} = -6.0 \text{ V}, I_C = -1.0 \text{ mA}$
ΔV_{BE}	Base to Emitter Voltage Difference		2.0	5.0	mV	$V_{CE} = -6.0 \text{ V}, I_C = -1.0 \text{ mA}$ $\Delta V_{BE} = V_{BE1} - V_{BE2} $
NV	Noise Voltage			80	mV	See Test Circuit
C_{ob}	Output Capacitance		4.0		pF	$V_{CB} = -30 \text{ V}, I_E = 0, f = 1.0 \text{ MHz}$
I_{CBO}	Collector Cutoff Current			-1.0	μA	$V_{CB} = -70 \text{ V}, I_E = 0$
I_{EBO}	Emitter Cutoff Current			-1.0	μA	$V_{EB} = -4.0 \text{ V}, I_C = 0$
V_{BE}	Base to Emitter Voltage	-0.55		-0.65	V	$V_{CE} = -6.0 \text{ V}, I_C = -1.0 \text{ mA}$
$V_{CE(sat)}$	Collector Saturation Voltage			-0.3	V	$I_C = -10 \text{ mA}, I_B = -1.0 \text{ mA}$

Classification of h_{FE2}

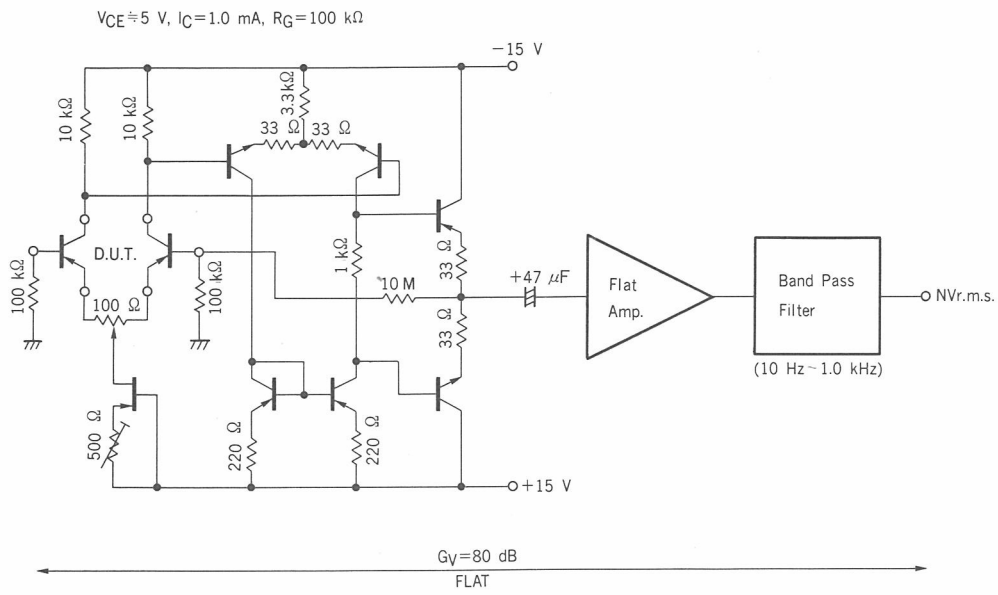
Rank	P	F	E
Range	200 — 400	300 — 600	400 — 800

Test Conditions: $V_{CE} = -6.0 \text{ V}, I_C = -1.0 \text{ mA}$

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NV TEST CIRCUIT



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