

KSA1174**PNP EPITAXIAL SILICON TRANSISTOR**

T-29-17

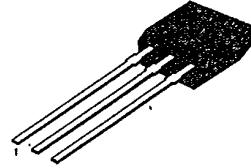
AUDIO FREQUENCY LOW NOISE AMPLIFIER

- Complement to KSC2784

ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

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	-50	mA
Base Current	I_B	-10	mA
Collector Dissipation	P_C	300	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55~150	$^\circ\text{C}$

TO-92S



1. Emitter 2. Collector 3. Base

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

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=-120\text{V}, I_E=0$			-50	nA
Collector Cutoff Current	I_{CEO}	$V_{CE}=-100\text{V}, R_{BE}=\infty$			-1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-50	nA
DC Current Gain	h_{FE1}	$V_{CE}=-6\text{V}, I_C=-0.1\text{mA}$	150	500		
	h_{FE2}	$V_{CE}=-6\text{V}, I_C=-1\text{mA}$	200	500	800	
Base Emitter On Voltage	$V_{BE}(\text{on})$	$V_{CE}=-6\text{V}, I_C=-1\text{mA}$	-0.55	-0.61	-0.65	V
Collector Emitter Saturation Voltage	$V_{CE}(\text{sat})$	$I_C=-10\text{mA}, I_B=-1\text{mA}$		-0.09	-0.3	V
Current Gain Bandwidth Product	f_T	$V_{CE}=-6\text{V}, I_E=1\text{mA}$	50	100		MHz
Output Capacitance	C_{ob}	$V_{CB}=-30\text{V}, I_E=0$ $f=1\text{MHz}$		2	3	pF
Noise Voltage	NV			25	40	mV

 $h_{FE}(2)$ CLASSIFICATION

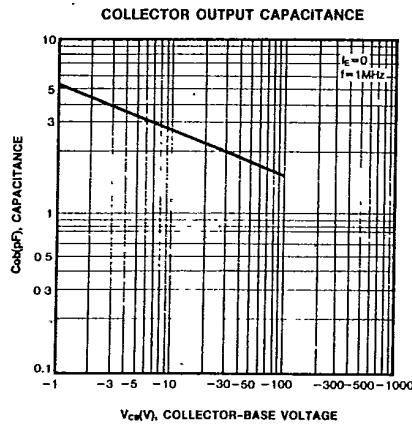
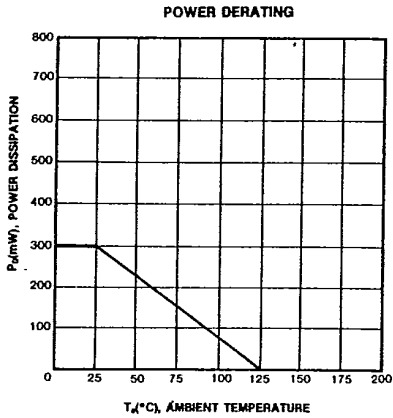
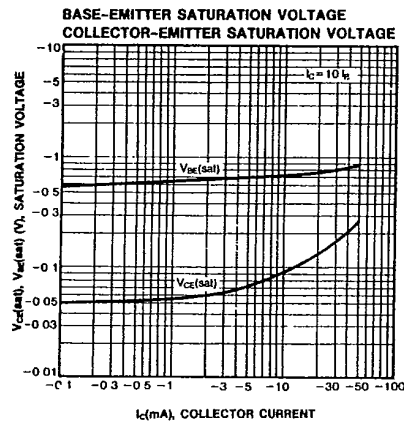
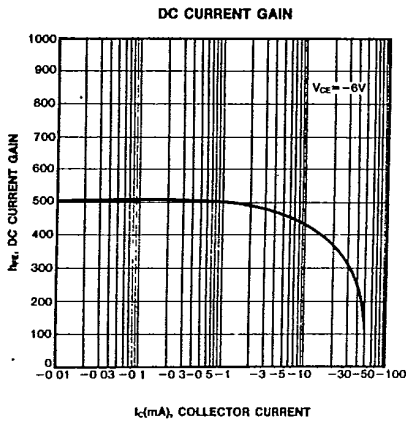
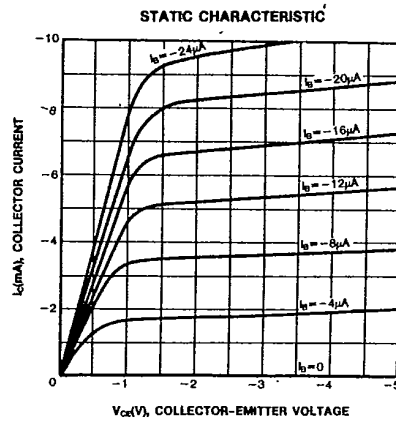
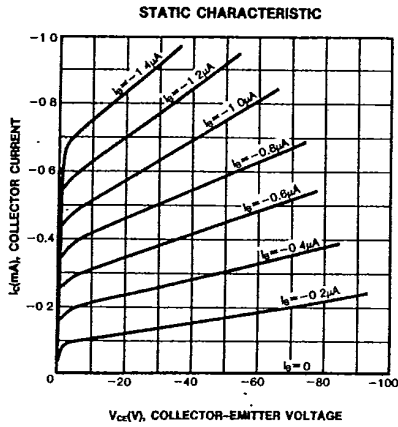
Classification	P	F	E
$h_{FE}(2)$	200-400	300-600	400-800



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