

LOW FREQUENCY POWER AMPLIFIER

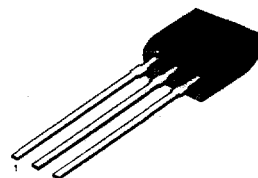
- Complement to KSC2710
- Collector Dissipation $P_C = 300\text{mW}$

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	-40	V
Collector-Emitter Voltage	V_{CE0}	-20	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current (DC)	I_C (DC)	-500	mA
*Collector Current (Pulse)	I_C (Pulse)	-700	mA
Collector Dissipation	P_C	300	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ 150	$^\circ\text{C}$

* $PW \leq 350\text{ms}$, Duty cycle $\leq 50\%$

TO-92S



1. Emitter 2. Collector 3. Base

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

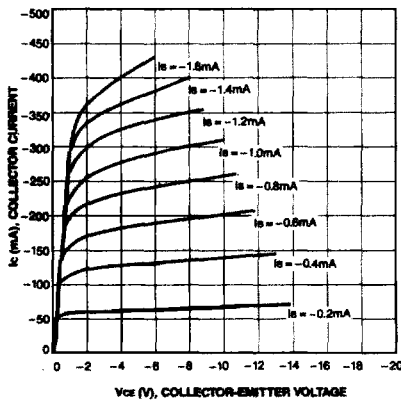
Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CB0}	$I_C = -100\mu\text{A}$, $I_E = 0$	-40			V
Collector-Emitter Breakdown Voltage	BV_{CE0}	$I_C = -10\text{mA}$, $I_B = 0$	-20			V
Emitter-Base Breakdown Voltage	BV_{EB0}	$I_E = -100\mu\text{A}$, $I_C = 0$	-5			V
Collector Cut-off Current	I_{CB0}	$V_{CB} = -25\text{V}$, $I_E = 0$			-100	nA
Emitter Cut-off Current	I_{EB0}	$V_{EB} = -3\text{V}$, $I_C = 0$			-100	nA
*DC Current Gain	h_{FE}	$V_{CE} = -1\text{V}$, $I_C = -100\text{mA}$	40		400	
*Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$		-0.3	-0.4	V
*Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$		-1.0	-1.3	V

* Pulse Test : $PW \leq 350\mu\text{s}$, Duty cycle $\leq 2\%$

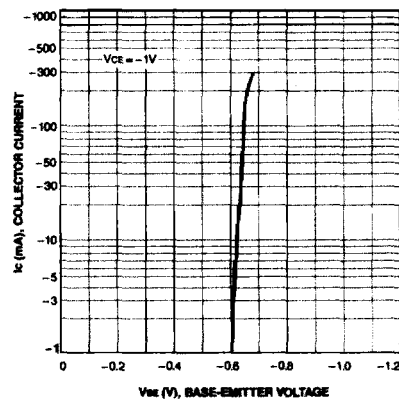
 h_{FE} CLASSIFICATION

Classification	R	O	Y	G
h_{FE}	40-80	70-140	120-240	200-400

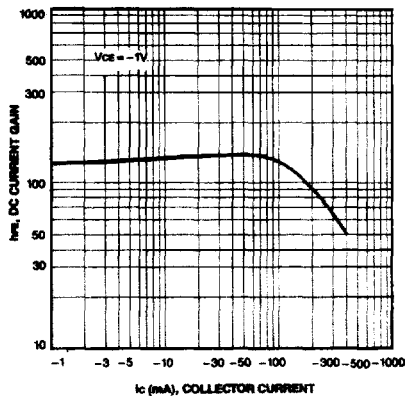
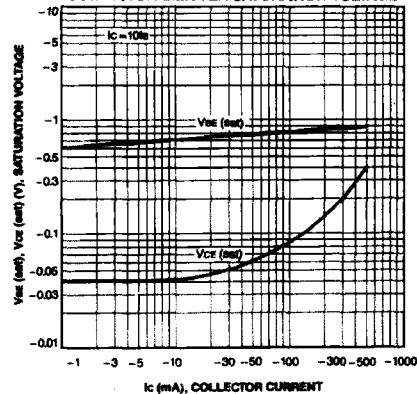
STATIC CHARACTERISTIC



BASE-EMITTER ON VOLTAGE



DC CURRENT GAIN

BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE

COLLECTOR OUTPUT CAPACITANCE

