

**KSC2710**

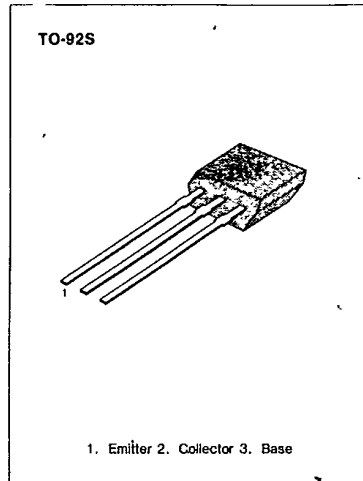
**NPN EPITAXIAL SILICON TRANSISTOR**

**LOW FREQUENCY POWER AMPLIFIER**

- Complement to KSA1150
- 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	$I_C$	500	mA
Collector Dissipation	$P_C$	300	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 ~ 150	$^\circ\text{C}$



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**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	$I_{CB0}$	$V_{CB}=25\text{V}, I_E=0$			0.1	$\mu\text{A}$
Emitter Cut-off Current	$I_{EB0}$	$V_{EB}=3\text{V}, I_C=0$			0.1	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE}=1\text{V}, I_C=0.1\text{A}$	40		400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=0.5\text{A}, I_B=0.05\text{A}$		0.18	0.4	V

**$h_{FE}$  CLASSIFICATION**

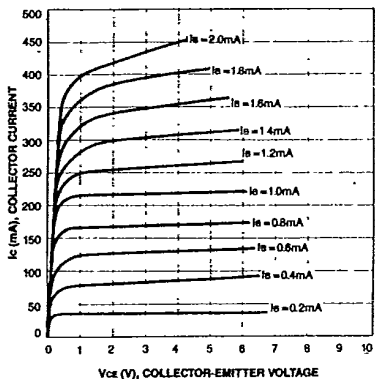
Classification	R	O	Y	G
$h_{FE}$	40-80	70-140	120-240	200-400

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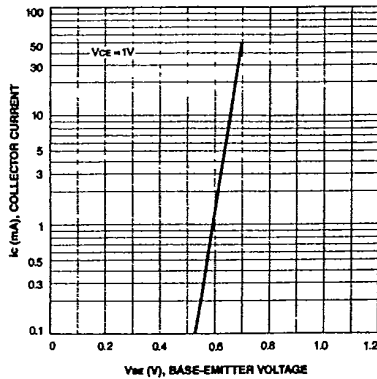
NPN EPITAXIAL SILICON TRANSISTOR

T-29-17

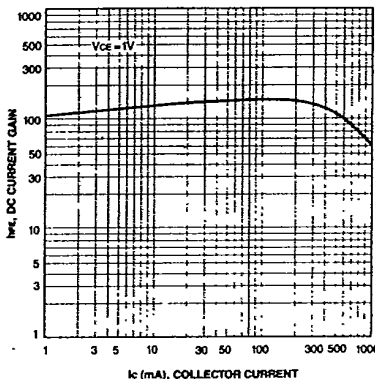
STATIC CHARACTERISTIC



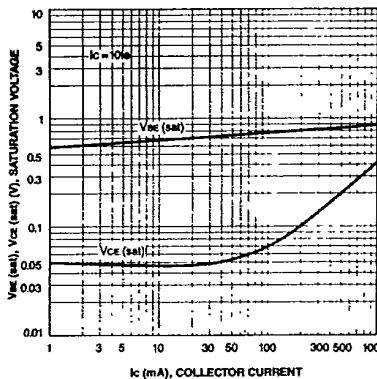
BASE-EMITTER ON VOLTAGE



DC CURRENT GAIN



BASE-EMITTER SATURATION VOLTAGE  
COLLECTOR-EMITTER SATURATION VOLTAGE



COLLECTOR OUTPUT CAPACITANCE

