

# Guangdong Yuejing High Technology CO.,LTD.

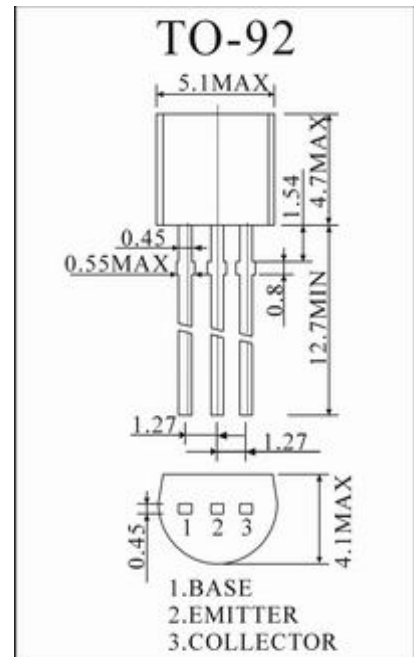
## KSP10

—NPN silicon—

■ ■ APPLICATION: Low noise UHF/VHF amplifiers Applications.

### ■ ■ MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V <sub>CBO</sub>	30	V
Collector-emitter voltage	V <sub>CEO</sub>	25	V
Emitter-base voltage	V <sub>EBO</sub>	3	V
Collector current	I <sub>C</sub>	50	mA
Collector Power Dissipation	P <sub>C</sub>	350	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	- 55~15	°C



### ■ ■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	h <sub>FE</sub>	60				V <sub>CE</sub> = 10V, I <sub>C</sub> = 4mA
Collector Cut-off Current	I <sub>CBO</sub>			0.1	μA	V <sub>CB</sub> = 25V, I <sub>E</sub> =0
Emitter Cut-off Current	I <sub>EBO</sub>			0.1	μA	V <sub>EB</sub> =2V, I <sub>C</sub> =0
Collector-Base Breakdown Voltage	BV <sub>CBO</sub>	30			V	I <sub>C</sub> = 0.1mA, I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	25			V	I <sub>C</sub> = 1mA, I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	3			V	I <sub>E</sub> = 0.1mA, I <sub>C</sub> =0
Base-Emitter on Voltage	V <sub>BE(on)</sub>			0.95	V	V <sub>CE</sub> = 10V, I <sub>C</sub> = 4mA
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>		0.2	0.5	V	I <sub>C</sub> = 4mA, I <sub>B</sub> = 0.4mA
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>			1	V	I <sub>C</sub> = 4mA, I <sub>B</sub> = 0.4mA
Gain bandwidth product	f <sub>T</sub>	650			MHz	I <sub>C</sub> = 4mA, V <sub>CE</sub> = 10V
Common Base Output Capacitance	C <sub>ob</sub>			2	PF	V <sub>CB</sub> = 10V, I <sub>E</sub> =0, f=1MHz

### ■ ■ h<sub>FE</sub> Classification And Marking

Classification

h<sub>FE</sub> >60