The CK725 is a PNP junction transistor intended primarily for use in audio or low radio frequency applications. The tinned flexible leads may be soldered or welded directly to the terminals of circuit components without the use of sockets. Standard inline subminiature sockets may be used by cutting the leads to a suitable length.

MECHANICAL DATA
CASE: Plastic and Glass
BASE: None (0.016" tinned flexible leads. Length: 1.5" min. Spacing: 0.08" center-to-center)
TERMINAL CONNECTIONS: (Red Dot is adjacent to Lead 1)
Lead 1 Collector
Lead 2 Base
Lead 3 Emitter
MOUNTING POSITION: Any

ELECTRICAL DATA
RATINGS - ABSOLUTE MAXIMUM VALUES:
Collector Voltage (Vc) * -12 volts
Peak Collector Voltage (Vce) † -24 volts
Collector Current -10 ma.
Collector Dissipation *
Emitter Current 10 ma.
Ambient Temperature * 70 °C

AVERAGE CHARACTERISTICS: (at 27°C)
Collector Voltage -6 volts
Emitter Current 1.0 ma.
Collector Resistance 2.0 meg.
Base Resistance 1500 ohms
Emitter Resistance 25 ohms
Base Current Amplification Factor 90
Cutoff Current (approx.) 6 µa.
Noise Factor (max.) 20 db.

AVERAGE CHARACTERISTICS - COMMON Emitter: (at 27°C)
Collector Voltage -1.5 volts
Emitter Current 0.5 ma.
Input Resistance 4300 ohms
Load Resistance 20,000 ohms
Power Gain (Matched Input) 40

AVERAGE CHARACTERISTICS - COMMON Collector: (at 27°C)
Collector Voltage -6 volts
Emitter Current 1.0 ma.
Input Resistance 1.0 meg.
Load Resistance 20,000 ohms
Power Gain (Matched Input) 16 db.

AVERAGE CHARACTERISTICS - COMMON Base: (at 27°C)
Collector Voltage -6 volts
Emitter Current 1.0 ma.
Input Resistance 110 ohms
Load Resistance 0.1 meg.
Power Gain (Matched Input) 30 db.

* This is the maximum operating or storage temperature recommended.
† Measured under conditions for grounded emitter operation at Vc=5 volts for a 1 cycle bandwidth at 1000 cycles.
‡ Higher input impedances, without appreciable loss in gain, can be achieved by operating at lowered collector current.
† This is a function of maximum ambient temperature (T A) expected. It is approximately equal to 4(T 70 °C - T A) milliwatts.
§ In circuits stabilized for Ic or Ie, and which do not have critical distortion requirements, absolute maximum peak voltage is 45 volts.
† Collector voltage Vce at which Ic rises to 2 ma. in common emitter circuit with base lead connected directly to emitter lead. Ambient temperature = 25°C.

Tentative Data
GROUNDED BASE
Typical Collector Characteristics

Collector Current ($I_C$) vs Collector to Base Voltage ($V_{CB}$) in Volts

GROUNDED EMITTER
Typical Collector Characteristics

Collector Current ($I_C$) vs Collector to Emitter Voltage ($V_{CE}$) in Volts

This family is a function of $1-\alpha$ and thus changes appreciably with small changes in $\alpha$. 

RAYTHEON MANUFACTURING COMPANY
RECEIVING AND CATHODE RAY TUBE OPERATIONS
February 22, 1955
NEWTON 58, MASS.
TYPICAL CHARACTERISTICS AS A FUNCTION OF JUNCTION TEMPERATURE

Temperature - Degrees Centigrade

Percent of Value at 27°C

Arrows refer to positive electrode current flow.