The CK6121 is a filament type triode of subminiature construction designed for use as a Class C amplifier or frequency multiplier in the VHF frequency band. The characteristics of this type are optimized for high grid drive conditions typical of frequency multiplier service. The CK6121 is suitable for battery operated, short life special applications at the typical Class C operation conditions indicated below. The filament of the CK6121 should not be operated continuously inasmuch as its 10 hour life rating is chiefly a function of the filament temperature and hours of filament operation. The flexible terminal 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

ENVELOPE: T-2X3 Glass

BASE: None (0.016" tinned flexible leads. Length: 1.5" min.
Spacing: 0.048" center-to-center)

TERMINAL CONNECTIONS: (Red dot is adjacent to Lead 1)
Lead 1: Plate
Lead 2: Filament, negative
Lead 3: Grid
Lead 4: Filament, positive

MOUNTING POSITION: Any

ELECTRICAL DATA

DIRECT INTERELECTRODE CAPACITANCE: (pF) (unshielded)
Grid to Plate
Grid to Filament
Plate to Filament

RATINGS–ABSOLUTE MAXIMUM VALUES – CLASS C OPERATION:
Filament Voltage (dc) 1.25 ± 0.20 volts
DC Plate Voltage 185 volts
DC Negative Grid Bias 90 volts
DC Plate Current 8 ma.
DC Grid Current 0.45 ma.
Peak RF Grid Drive Voltage 100 volts
Plate Dissipation 1.1 watts

CHARACTERISTICS AND TYPICAL OPERATION – CLASS A1 AMPLIFIER:
Filament Voltage (dc) 1.25 volts
Filament Current 0.12 amp.
Plate Voltage 135 volts
Grid Voltage –5 volts
Transconductance 1600 µmhos
Amplification Factor 15
Plate Current 4.0 ma.
Grid Voltage for Ib=15 µa. –10 volts

CHARACTERISTICS AND TYPICAL OPERATION – CLASS C FREQUENCY DOUBLER:
Filament Voltage (dc) 1.5 volts
Filament Current 0.12 amp.
DC Plate Voltage 185 volts
Grid Resistor 0.24 meg.
Peak RF Grid Drive Voltage (F= 80 Mc) 95 volts
DC Grid Current (approx.) 0.35 ma.
DC Plate Current 7.0 ma.
Plate Input Power 1.3 watts
Useful RF Power Output (F= 160 Mc) 0.2 watts.