



ELECTRONIC TUBE REFERENCE

TKBC1

Voltage - Triode (with diode, heptode or hexode) electronic tube

CONSOLIDATED TECHNICAL
DATA

3 SECTIONS

CONSTRUCTION

DIODE-DIODE-TRIODE

Low-voltage double-diode triode for battery-operated receiver signal processing. Two diodes provide detector and control-voltage rectification while the triode supplies a separate low-level amplifier stage.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	2 V / 100 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Diode

MAXIMUM CATHODE CURRENT 0.2 mA

Tungsrām TKBC1 first physical detector diode, connected at pin 7, adjacent to the negative filament terminal at pin 3. Manufacturer specifies diode current limit 0.2 mA and peak inverse voltage 125 V. Separate physical diode sections are retained; do not interpret peak reverse voltage as continuous positive anode rating.

SECTION2 Diode

MAXIMUM CATHODE CURRENT 0.2 mA

Tungsrām TKBC1 second physical detector diode, connected at pin 8, adjacent to the other filament terminal at pin 2. Manufacturer specifies diode current limit 0.2 mA and peak inverse voltage 125 V. This diode may be used for detector or AVC rectification independently of the first diode.

SECTION3 Triode

PLATE RESISTANCE	16000 Ω
------------------	----------------

TRANSCONDUCTANCE	0.001 S
------------------	---------

Tungsrām TKBC1 directly heated battery double-diode triode, 2 V filament at 0.1 A. Triode typical characteristics at 90 V anode: transconductance 0.7 mA/V and plate resistance 23 k Ω ; at 135 V: transconductance 1.0 mA/V and plate resistance 16 k Ω . Promoted values use the 135 V operating point, not universal maxima; two distinct physical diode detector sections are also present.

Battery double-diode triode combining detector diodes with a triode amplifier section for portable radio receivers.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X Tunsgram

Published test conditions and operating points. Values on this page are preserved as reported by this source.

195X TUNSGRAM

Section 1 · Diode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater or filament voltage	2 V	Published nominal value
Heater or filament current	100 mA	Published nominal value

195X TUNSGRAM

Section 3 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater or filament voltage	2 V	Published nominal value
Heater or filament current	100 mA	Published nominal value