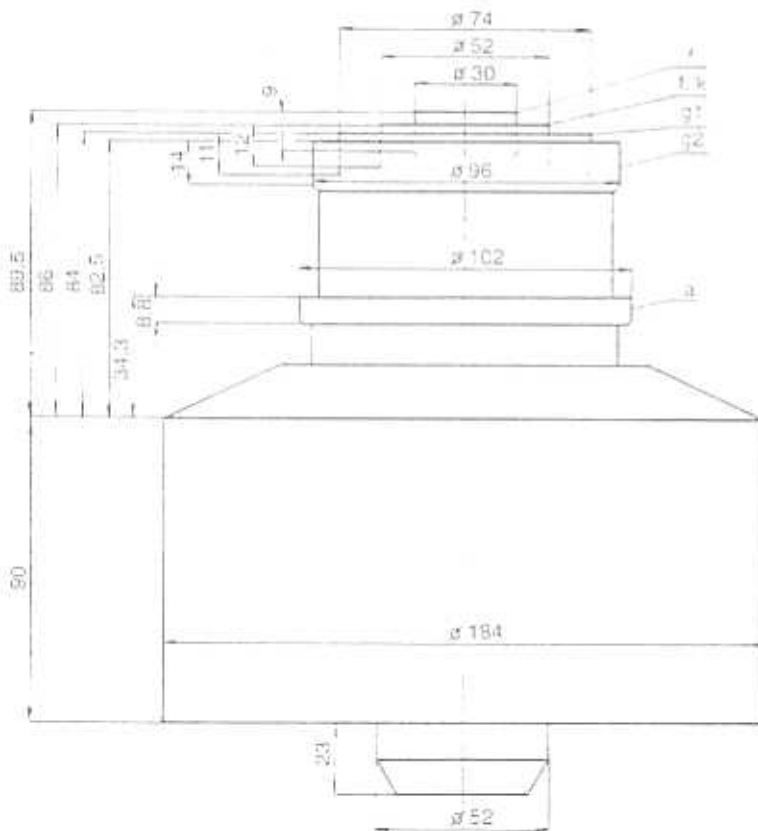




TESLA - ECIMEX a. s.



The RE 20 XM is a forced-air cooled, ceramic-metal power tetrode for frequencies up to 300 MHz, with coaxial arrangement of electrode terminals.

The maximum anode dissipation rating is 22 kW.

The RE 20 XM is primarily intended for use in TV transmitters, band I to III.

**RE 20 XM**

# RE 20 XM

## HEATING DATA

Filament voltage	V <sub>f</sub>	11,5	V
Filament current	I <sub>f</sub>	125	A
Cathode	thoriated tungsten, direct heating, mesh type		

It is recommended to keep the cathode pre-heated permanently by a voltage of approximately 0,5 V (no forced cooling is needed).

For allowed tolerances and other limitations see the General part of the catalogue.

## MAXIMUM RATINGS

Anode voltage (f = 300 MHz)	V <sub>a</sub>	7	kV
(up to 30 MHz)	V <sub>a</sub>	8	kV
Screen grid voltage	V <sub>g2</sub>	850	V
Cathode peak current	I <sub>cp</sub>	40	A
Anode dissipation	W <sub>a</sub>	22	kW
Screen grid dissipation	W <sub>g2</sub>	250	W
Control grid dissipation	W <sub>g1</sub>	80	W
Operating frequency	f	300	MHz

## GENERAL DATA

### Electrical

Interelectrode capacitances	C <sub>akg1</sub>	105	pF
	C <sub>ag2</sub>	26	pF
	C <sub>g1g2</sub>	220	pF
	C <sub>ag1</sub> <sup>*)</sup>	1,2	pF
	C <sub>ak</sub> <sup>*)</sup>	0,08	pF

\*) Measured with a shield disc (300 mm dia.) mounted on the screen grid terminal.

Transconductance (at V <sub>a</sub> = 3 kV, V <sub>g2</sub> = 600 V, I <sub>a</sub> = 2,5 A)	S	110	mA/V
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Amplification factor (at V <sub>a</sub> = 2 kV, I <sub>a</sub> = 3 A, V <sub>g2</sub> = 700 V)	μ <sub>g2g1</sub>	9	
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Emission current (at V <sub>a</sub> = V <sub>g2</sub> = V <sub>g1</sub> = 1000 V)	I <sub>e</sub>	135	A
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### Mechanical

Mounting position	vertical		
Weight	approx.	9,6	kg

### Cooling

	forced air		
Inlet air temperature		-15 to +40	°C
Air flow at maximum ratings		24	m <sup>3</sup> /min
Pressure drop		1500	Pa
Maximum temperature of anode		250	°C
of any other part		220	°C

For other limitations see the General part.

# CONSTANT CURRENT CHARACTERISTICS

