



ELECTRONIC TUBE REFERENCE

YD1352S

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Water-cooled magnetically focused metal-ceramic triode designed for industrial Class C RF oscillator service to approximately 5 MHz.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	5 V / 6.1 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.004 S
AMPLIFICATION FACTOR	25
MAXIMUM PLATE VOLTAGE	4500 V
MAXIMUM PLATE DISSIPATION	2000 W
MAXIMUM GRID DISSIPATION	25 W
MAXIMUM CATHODE CURRENT	730 mA
Water-cooled industrial RF triode	

Water-cooled magnetically focused metal-ceramic triode intended for industrial RF class-C oscillator service up to 5 MHz.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips E-Z

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

1999 PHILIPS E-Z

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
8867 YD1	352 S	—
Oscillator output power (W,~-Wgeeqh), typical Wosc	3 kw	Oscillator
Frequency for full ratings f max	5 MHz	Oscillator
Frequency f	5 MHz	Oscillator
Oscillator output power (Wo~Wseedh) Wose	3094 W	Oscillator
Transformer voltage Vtr rms	5000 V	Oscillator
Anode voltage, mean Va	4500 V	Oscillator
Anode current, mean Iy	720 mA	Oscillator
Anode input power Wia	4000 W	—
Anode dissipation W,	900 W	—
Anode output power Wo	3100 W	—
Grid current, on load Ig	4.5 mA	Oscillator
off load Ig	9 mA	—
Grid voltage, negative Vg	360 v	—
Grid dissipation Wg	4.4 W	—
Grid resistor dissipation wRg	1.6 W	—
1) Max	565 V	—
YD1	352 S	—
Frequency for full ratings f max	5 MHz	—
Anode current, mean I, max	725 mA	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode input power W_{iy} max	4 kW	—
Anode dissipation W_a max	2 kW	—
Grid dissipation w max	25 w	—
Grid circuit resistance R_g max	88 k Ω	—
Cathode current, mean I_x max	730 mA	—
Seal temperature t max	200 °C	—
Heater voltage V_h	5 v	—
Heater current I_h	6.1 A	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode to cathode C_{ak}	0.3 pF	—
Grid to cathode C_{gk}	9.8 pF	—
Anode to grid C	11.5 pF	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
CHARACTERISTICS measured at V , [1]	3 kV	—
CHARACTERISTICS measured at V , [2]	500 mA	—
Transconductance S	4 mA	—
Magnetic flux density B min	115 mT	—
Amplification factor μ 25	1150 Gs	—
YD1	352 S	—
YDI1	352 S	—
1000 N P I_g	20 mA	—
μ NS	410 mA	—
500 [T μ A ST A	15 A	—
\	5 A	—

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

