

415A

Voltage - Pentode High Frequency (single) electronic tube

Western Electric UHF suppressor-grid pentode with independent suppressor control for gating, modulation, mixing, and specialized high-frequency circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	–	BASE PINS	7
NOMINAL HEATER	6.3 V / 150 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
TRANSCONDUCTANCE	0.00185 S
MAXIMUM PLATE VOLTAGE	180 V
MAXIMUM SCREEN VOLTAGE	140 V
MAXIMUM PLATE DISSIPATION	1.7 W
MAXIMUM SCREEN DISSIPATION	0.75 W
MAXIMUM CATHODE CURRENT	18 mA
Promoted fields mapped from printed maximum-rating and characteristic headings; additional published values preserved in parameter rows.	

Miniature suppressor-grid pentode for UHF service and independent suppressor-grid control.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

2026 Western Electric 400s

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

2026 WESTERN ELECTRIC 400S

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage, A-C or B-C ceun... rrrtesveenas teereans	6.3 volts	Heater Voltage, A-C or B-C ceun... rrrtesveenas teereans 6.3 volts
Nominal Heater Current vveecenenns titicenenaacs srsetsesnnana	150 milliamperes	Nominal Heater Current vveecenenns titicenenaacs srsetsesnnana 150 milliamperes
Piate Voltage fedstesaanseartieracans Geresesvrnesnoca ceeseee	180 volts	Piate Voltage fedstesaanseartieracans Geresesvrnesnoca ceeseee 180 volts
'Screen	6 volts	'Screen-Grid Voltage reversreanna sererserrassas teeseresarranna 1IN0 volts
Cathode Current .c.ccevcacrvanvasanana	18 milliamperes	Cathode Current .c.ccevcacrvanvasanana 18 milliamperes
Heater-Cathode Voltage sesan	80 volts	Heater-Cathode Voltage sesan 80 volts
Bulb Temperature cuc... titseennenas	120 centigrade	Bulb Temperature cuc... titseennenas 120 centigrade
Plate VOLTage .uvvenkraesoncrancnnsstcusnonnnsannssssnsesn	120 volts	Plate VOLTage .uvvenkraesoncrancnnsstcusnonnnsannssssnsesn 120 120 volts
Control-Grid Voltage Chessravssans Gttt esatansrasanaa	-2 volts	Control-Grid Voltage Chessravssans Gttt esatansrasanaa -2 -2 volts
Plate Current ...cvvicvnecaes resessannanaan Seersasnesetonans	3.6 milliamperes	Plate Current ...cvvicvnecaes resessannanaan Seersasnesetonans 3.6 5.2 milliamperes
Plate Voltage e Pt e et it i et s aas s n e ean ey 'e	120 volts	Plate Voltage e Pt e et it i et s aas s n e ean ey 'e 120 volts
Screen-Grid Voltage cvvrevunncacnnnses Crreaarenaeae ve et senaascaansrnn	120 volts	Screen-Grid Voltage cvvrevunncacnnnses Crreaarenaeae ve et senaascaansrnn 120 volts
Plate Voltage .v.ocrvevecenaennnns PPN Chraenrsseaann randndssansennrne	120 volts	Plate Voltage .v.ocrvevecenaennnns PPN Chraenrsseaann randndssansennrne 120 volts
Screen-Grid Voltage +..vevuncrenneeonnnns e diererass e	-120 volts	Screen-Grid Voltage +..vevuncrenneeonnnns e diererass e . - 120 volts
current of	10 volts	current of 10 MiCrodmperes ...ceeveescssmoncecesonanasssnsas P . -10 volts
Published value	4 VOLTS	4 GRID VOLTAGE =120 VOLTS —+ 14 tes I
T s IscREEN-GRID VOLTAGE	120 VOLTS	T s IscREEN-GRID VOLTAGE 120 VOLTS 1 ; EB=ECE=15V y
Published value	4 VOLTS	4 Ef-63 VOLTS __ PLATE VOLTAGE®20 VOLTS 2 r-63 VOLTS g
SCREEN-GRID VOLTAGE =	120 VOLTS	SCREEN-GRID VOLTAGE =120 VOLTS 10 PLATE vOL

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
VOLTAGE	120 VOLTS	VOLTAGE : 120 VOLTS/
Published value	2 VOLTS	2 -- — L e — PLATE VOLTAGE=(20 VOLTS
Ef	263 VOLTS	- Ef 263 VOLTS Z0 \ SCREEN-GRID VOLTAGE= 120 VOLTS
z.° PLATE VOLTAGE =	120 VOLTS	z.° PLATE VOLTAGE =120 VOLTS &0 N
Published value	13 VOLTS	13 SOREEN-GRID VOLTAGE =120 VOLTS €~ - 1 [
wb	5000 VOLTS	wb 5000 PLATE VOLTAGE=I20 VOLTS L
Published value	1400 VOLTS	1400 YOUTAGE Eci==1/N\ PLATE VOLTAGE=I20 VOLTS
w \ SCREEN-GRIG VOLTAGE =	120 VOLTS	w \ SCREEN-GRIG VOLTAGE =120 VOLTS

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Dissipation ceesvas tissenenaee teessesconnasaanss taetsasennnene	1.7 watts	Plate Dissipation ceesvas tissenenaee teessesconnasaanss taetsasennnene 1.7 watts
Screen-Grid Dissipation v.c.... teacrecenaanas teeaseatresnanes sreesen	0.75 watt	Screen-Grid Dissipation v.c.... teacrecenaanas teeaseatresnanes sreesen 0.75 watt

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