

R10

Russian Tube

Uncontrolled

Overvoltage protection

Specifications		
Name		Value
Envelope		Glass
Mass		8
Spark voltage, kv		1.5
Spark voltage, kv Minimum		1.35
Spark voltage, kv Maximum		1.65
Spark frequency, hz		1.8
Spark frequency, hz Minimum		1.5
Spark frequency, hz Maximum		2
Insulation resistance, mohm		20
Life, pulses		30000

R12

Russian Tube
Uncontrolled
Universal

Specifications		
Name		Value
Envelope		Glass
Mass		12
Spark voltage, kv		0.16
Spark voltage, kv Minimum		0.128
Spark voltage, kv Maximum		0.192
Insulation resistance, mohm		1000

R18

Russian Tube

Uncontrolled

High frequency circuit commutation in radars

Specifications	
Name	Value
Envelope	Glass
Mass	10
Commutated power, kw	0.07(3.5 in pulse)
Ignition power, w	500
Insulation resistance, mohm	0.1
Pulse duration, us	8.5
Pulse duration, us Minimum	7
Pulse duration, us Maximum	10

R181

Russian Tube

Uncontrolled

High frequency circuit commutation in radars

Specifications	
Name	Value
Envelope	Glass
Mass	10
Commutated power, kw	0.07(3.5 in pulse)
Ignition power, w	500
Insulation resistance, mohm	0.1
Pulse duration, us	8.5
Pulse duration, us Minimum	7
Pulse duration, us Maximum	10

R21

Russian Tube

Controlled

High frequency circuit commutation in radars

Specifications	
Name	Value
Envelope	Glass
Spark voltage, kv	1.5
Spark voltage, kv Minimum	1.05
Spark voltage, kv Maximum	2
Spark frequency, hz	40
Commutated energy, j	5
Pulse duration, us	30
Life, pulses	15*10e7

R22

Russian Tube

Uncontrolled

Application in ignition systems

Specifications	
Name	Value
Envelope	Glass
Spark voltage, kv	2.2
Spark voltage, kv Minimum	1.9
Spark voltage, kv Maximum	2.5
Spark frequency, hz	60
Commutated power, kw	0.06
Insulation resistance, mohm	10
Discharged capacitance, uf	3.4
Discharged capacitance, uf Minimum	0.13
Discharged capacitance, uf Maximum	6.6

R23

Russian Tube

Uncontrolled

Overvoltage protection

Specifications	
Name	Value
Envelope	Glass
Mass	10
Spark voltage, kv	0.15
Spark voltage, kv Minimum	0.06
Spark voltage, kv Maximum	0.24

R24

Russian Tube

Controlled

High frequency circuit commutation

Specifications		
Name		Value
Envelope		Metal-glass
Mass		140
Spark voltage, kv		3.8
Spark voltage, kv Minimum		2
Spark voltage, kv Maximum		5.5
Spark frequency, hz		1
Anode current, a		10
Anode current, a Minimum		8
Anode current, a Maximum		12
Discharged capacitance, uf		0.5
Pulse duration, us		4.5
Pulse duration, us Minimum		4
Pulse duration, us Maximum		5
Life, pulses		1*10e6

R26

Russian Tube

Uncontrolled

Application in ignition systems

Specifications		
Name		Value
Envelope		Metal-glass
Mass		50
Spark voltage, kv		2.9
Spark voltage, kv Minimum		2.6
Spark voltage, kv Maximum		3.1
Commutated power, kw		0.06
Discharged capacitance, uf		0.515
Discharged capacitance, uf Minimum		0.03
Discharged capacitance, uf Maximum		1

R27

Russian Tube

Uncontrolled

Overvoltage protection

Specifications	
Name	Value
Envelope	Glass
Mass	10
Spark voltage, kv	0.35
Spark voltage, kv Minimum	0.31
Spark voltage, kv Maximum	0.39

R28

Russian Tube
Uncontrolled
Swithing

Specifications		
Name		Value
Envelope		Glass
Mass		12
Spark frequency, hz		2200
Commutated power, kw		0.012-0.1(12-15 in pulse)
Ignition power, w		150
Insulation resistance, mohm		10

R29

Russian Tube

Uncontrolled

Application in ignition systems

Specifications	
Name	Value
Envelope	Metal-ceramic
Mass	30
Spark voltage, kv	2.4
Spark voltage, kv Minimum	1.9
Spark voltage, kv Maximum	2.9
Spark frequency, hz	475
Spark frequency, hz Minimum	300
Spark frequency, hz Maximum	650
Commutated energy, j	0.06
Insulation resistance, mohm	10

R2M

Russian Tube

Uncontrolled

Application in capacitive ignition systems

Specifications		
Name		Value
Envelope		Metal-glass
Mass		5
Spark voltage, kv		1.8
Spark voltage, kv Minimum		1.3
Spark voltage, kv Maximum		2.35
Spark frequency, hz		4.3
Spark frequency, hz Minimum		4
Spark frequency, hz Maximum		4.5
Insulation resistance, mohm		20
Discharged capacitance, uf		0.75
Discharged capacitance, uf Minimum		0.5
Discharged capacitance, uf Maximum		1
Life, pulses		1300

R3

Russian Tube

Uncontrolled

High frequency circuit commutation in radars

Specifications		
Name		Value
Envelope		Glass
Mass		20
Spark voltage, kv		0.6
Spark frequency, hz		350
Insulation resistance, mohm		100
Pulse duration, us		8

R30

Russian Tube

Controlled

Application as comutator of pulse light sources

Specifications	
Name	Value
Envelope	Metal-ceramic
Mass	400
Spark voltage, kv	7.5
Spark voltage, kv Minimum	6.7
Spark voltage, kv Maximum	8.2
Spark frequency, hz	3000
Commutated energy, j	0.125
Life, pulses	3.5*10e6

R34

Russian Tube

Uncontrolled

Overvoltage protection

Specifications	
Name	Value
Envelope	Metal-glass
Spark voltage, kv	1
Spark voltage, kv Minimum	0.7
Spark voltage, kv Maximum	1.3
Spark frequency, hz	5
Insulation resistance, mohm	100
Pulse duration, us	60
Life, pulses	1000

R35

Russian Tube

Uncontrolled

Overvoltage protection

Specifications		
Name		Value
Envelope		Glass
Mass		40
Spark voltage, kv		0.35
Spark voltage, kv Minimum		0.32
Spark voltage, kv Maximum		0.38
Anode current, a		15(2500 in pulse)
Insulation resistance, mohm		5000
Life, pulses		50

R350

Russian Tube

Uncontrolled

Communication lines and equipment protection

Specifications	
Name	Value
Envelope	Glass
Mass	25
Spark voltage, kv	0.35
Spark voltage, kv Minimum	0.31
Spark voltage, kv Maximum	0.39
Anode current, a	3
Life, pulses	25

R37

Russian Tube

Controlled

Pulse commutation

Specifications	
Name	Value
Envelope	Glass
Mass	40
Spark voltage, kv	1.4
Spark voltage, kv Minimum	0.8
Spark voltage, kv Maximum	2
Spark frequency, hz	0.5
Commutated energy, j	1
Pulse duration, us	3
Life, pulses	2*10e5

R38

Russian Tube
Uncontrolled
Universal

Specifications		
Name		Value
Envelope		Glass
Mass		20
Spark frequency, hz		425
Spark frequency, hz Minimum		350
Spark frequency, hz Maximum		500
Commutated power, kw		0.07(3.5 in pulse)
Ignition power, w		100
Insulation resistance, mohm		0.1
Pulse duration, us		50

R4

Russian Tube

Uncontrolled

Application in non-recoverable equipment

Specifications	
Name	Value
Envelope	Glass
Spark voltage, kv	0.075
Spark voltage, kv Minimum	0.07
Spark voltage, kv Maximum	0.08
Commutated energy, j	5*10e-4

R41

Russian Tube

Controlled

Switching and overvoltage protection

Specifications	
Name	Value
Envelope	Metal-ceramic
Mass	600
Spark voltage, kv	21.5
Spark voltage, kv Minimum	16
Spark voltage, kv Maximum	27
Spark frequency, hz	3 per minute
Commutated energy, j	2000
Pulse duration, us	3
Life, pulses	4000

R42

Russian Tube

Application in ignition systems

Specifications		
Name		Value
Envelope		Metal-ceramic
Mass		50
Spark voltage, kv		2.8
Spark voltage, kv Minimum		2.2
Spark voltage, kv Maximum		3.4
Spark frequency, hz		3
Commutated energy, j		20
Insulation resistance, mohm		100
Life, pulses		2000

R43

Russian Tube

Formation of high voltage pulses with a nanosecond leading edge

Specifications	
Name	Value
Envelope	Metal-ceramic
Mass	160
Spark voltage, kv	155
Spark voltage, kv Minimum	140
Spark voltage, kv Maximum	170
Spark frequency, hz	1
Commutated energy, j	2
Life, pulses	2*10e6

R44

Russian Tube

Uncontrolled

Application in ignition systems

Specifications	
Name	Value
Envelope	Glass
Spark voltage, kv	3
Spark voltage, kv Minimum	2.6
Spark voltage, kv Maximum	3.4
Commutated power, kw	0.06
Insulation resistance, mohm	1000
Discharged capacitance, uf	0.575
Discharged capacitance, uf Minimum	0.15
Discharged capacitance, uf Maximum	1

R45

Russian Tube

Protection in tv-sets

Specifications	
Name	Value
Envelope	Glass
Spark voltage, kv	0.45
Spark voltage, kv Minimum	0.3
Spark voltage, kv Maximum	0.6
Spark frequency, hz	3
Anode current, a	0.05
Pulse duration, us	70
Life, pulses	50

R46

Russian Tube

Overvoltage protection

Specifications		
Name		Value
Envelope		Glass
Mass		15
Spark voltage, kv		0.103
Spark voltage, kv Minimum		0.08
Spark voltage, kv Maximum		0.125
Anode current, a		0.8
Insulation resistance, mohm		10

R460

Russian Tube

Uncontrolled

Communication lines and equipment protection

Specifications		
Name		Value
Envelope		Glass
Spark voltage, kv		0.46
Anode current, a		3
Insulation resistance, mohm		5000
Life, pulses		10

R47

Russian Tube

High voltage pulse commutation

Specifications		
Name		Value
Envelope		Metal-glass
Mass		130
Spark voltage, kv		11
Spark voltage, kv Minimum		6
Spark voltage, kv Maximum		16
Spark frequency, hz		30
Spark frequency, hz Minimum		10
Spark frequency, hz Maximum		50
Commutated energy, j		92.5
Commutated energy, j Minimum		25
Commutated energy, j Maximum		160
Anode current, a		8000 in pulse
Anode current, a Minimum		6000 in pulse
Anode current, a Maximum		10000 in pulse
Life, pulses		10000

R48

Russian Tube

Formation of high voltage nanosecond pulses

Specifications	
Name	Value
Envelope	Metal-ceramic
Mass	100
Spark voltage, kv	100
Spark voltage, kv Minimum	90
Spark voltage, kv Maximum	110
Spark frequency, hz	1
Commutated energy, j	2
Life, pulses	2*10e6

R49

Russian Tube

Formation of high voltage nanosecond pulses

Specifications	
Name	Value
Envelope	Metal-ceramic
Mass	350
Spark voltage, kv	215
Spark voltage, kv Minimum	190
Spark voltage, kv Maximum	240
Spark frequency, hz	1
Commutated energy, j	2
Life, pulses	1*10e6

R5

Russian Tube

Uncontrolled

Application in ignition systems

Specifications	
Name	Value
Envelope	Glass
Mass	8
Spark voltage, kv	0.195
Spark voltage, kv Minimum	0.17
Spark voltage, kv Maximum	0.22
Insulation resistance, mohm	100

R51

Russian Tube

Overvoltage protection

Specifications		
Name		Value
Envelope		Glass
Mass		10
Spark voltage, kv		0.215
Spark voltage, kv Minimum		0.18
Spark voltage, kv Maximum		0.25
Spark frequency, hz		50
Anode current, a		1000 in pulse
Insulation resistance, mohm		5000
Pulse duration, us		60
Life, pulses		20

R52

Russian Tube

Controlled

Overvoltage protection

Specifications	
Name	Value
Envelope	Ceramic
Mass	600
Spark voltage, kv	17.5
Spark voltage, kv Minimum	10
Spark voltage, kv Maximum	25
Spark frequency, hz	3 per minute
Commutated energy, j	800
Anode current, a	1100 in pulse
Pulse duration, us	460
Life, pulses	4000

R54

Russian Tube

Uncontrolled

Overvoltage protection

Specifications		
Name		Value
Envelope		Glass
Mass		30
Spark voltage, kv		0.7
Spark voltage, kv Minimum		0.6
Spark voltage, kv Maximum		0.8
Spark frequency, hz		0.2
Anode current, a		600 in pulse
Pulse duration, us		275

R55

Russian Tube
Uncontrolled
Crt protection

Specifications		
Name		Value
Envelope		Glass
Mass		1
Spark voltage, kv		9.3
Spark voltage, kv Minimum		6.5
Spark voltage, kv Maximum		12
Spark frequency, hz		8
Anode current, a		5 in pulse
Insulation resistance, mohm		5000
Life, pulses		1200

R56

Russian Tube

Uncontrolled

Overvoltage protection

Specifications		
Name		Value
Envelope		Glass
Mass		15
Spark voltage, kv		0.1
Spark voltage, kv Minimum		0.075
Spark voltage, kv Maximum		0.125
Commutated energy, j		50
Anode current, a		2500 in pulse
Insulation resistance, mohm		10000
Pulse duration, us		60
Life, pulses		200

R58

Russian Tube

Uncontrolled

Low current to voltage pulses conversion in ionization chambers

Specifications		
Name		Value
Envelope		Glass
Mass		2
Spark voltage, kv		0.205
Spark voltage, kv Minimum		0.13
Spark voltage, kv Maximum		0.28
Spark frequency, hz		10000
Insulation resistance, mohm		1000
Life, pulses		1*10e8

R59

Russian Tube

Overvoltage protection

Specifications		
Name		Value
Envelope		Metal-ceramic
Mass		600
Spark voltage, kv		0.25
Spark voltage, kv Minimum		0.2
Spark voltage, kv Maximum		0.3
Anode current, a		3000 in pulse
Insulation resistance, mohm		100
Pulse duration, us		25000
Life, pulses		20

R6

Russian Tube

Uncontrolled

High frequency circuit commutation in radars

Specifications	
Name	Value
Envelope	Glass
Spark voltage, kv	0.8
Commutated power, kw	1.4(600 in pulse)
Insulation resistance, mohm	100

R60

Russian Tube

Overvoltage protection

Specifications		
Name		Value
Envelope		Metal-ceramic
Mass		600
Spark voltage, kv		2.7
Spark voltage, kv Minimum		2
Spark voltage, kv Maximum		3.3
Anode current, a		3000 in pulse
Insulation resistance, mohm		100
Pulse duration, us		25000
Life, pulses		20

R61

Russian Tube

Overvoltage protection

Specifications		
Name		Value
Envelope		Metal-ceramic
Mass		600
Spark voltage, kv		4.3
Spark voltage, kv Minimum		3.5
Spark voltage, kv Maximum		5
Anode current, a		3000 in pulse
Insulation resistance, mohm		100
Pulse duration, us		25000
Life, pulses		20

R63

Russian Tube

Uncontrolled

Overvoltage protection

Specifications	
Name	Value
Envelope	Metal-ceramic
Mass	50
Spark voltage, kv	0.25
Spark voltage, kv Minimum	0.2
Spark voltage, kv Maximum	0.3
Spark frequency, hz	0.1
Anode current, a	1000 in pulse
Insulation resistance, mohm	200
Life, pulses	200

R64

Russian Tube

Uncontrolled

Overvoltage protection

Specifications	
Name	Value
Envelope	Metal-ceramic
Mass	60
Spark voltage, kv	0.75
Spark voltage, kv Minimum	0.6
Spark voltage, kv Maximum	0.9
Spark frequency, hz	0.1
Anode current, a	1000 in pulse
Insulation resistance, mohm	200
Pulse duration, us	250
Life, pulses	200

R7

Russian Tube

Uncontrolled

Overvoltage protection

Specifications		
Name		Value
Envelope		Glass
Mass		8
Spark voltage, kv		0.3
Spark voltage, kv Minimum		0.27
Spark voltage, kv Maximum		0.33
Spark frequency, hz		1.8
Spark frequency, hz Minimum		1.5
Spark frequency, hz Maximum		2
Insulation resistance, mohm		20
Life, pulses		30000

R71

Russian Tube

Symmetrical lines protection

Specifications		
Name		Value
Envelope		Glass
Spark voltage, kv		0.23
Spark voltage, kv Minimum		0.18
Spark voltage, kv Maximum		0.28
Spark frequency, hz		1
Anode current, a		3000 in pulse
Insulation resistance, mohm		100
Pulse duration, us		25000
Life, pulses		20

R74

Russian Tube

Uncontrolled

Overvoltage protection

Specifications	
Name	Value
Envelope	Metal-ceramic
Spark voltage, kv	0.24
Spark voltage, kv Minimum	0.18
Spark voltage, kv Maximum	0.3
Anode current, a	1000 in pulse
Insulation resistance, mohm	500
Pulse duration, us	25125
Pulse duration, us Minimum	250
Pulse duration, us Maximum	50000

R75

Russian Tube

Uncontrolled

Overvoltage protection

Specifications	
Name	Value
Envelope	Metal-ceramic
Spark voltage, kv	0.95
Spark voltage, kv Minimum	0.7
Spark voltage, kv Maximum	1.2
Anode current, a	1000 in pulse
Insulation resistance, mohm	500
Pulse duration, us	25125
Pulse duration, us Minimum	250
Pulse duration, us Maximum	50000

R76

Russian Tube

Uncontrolled

Communication lines and equipment protection

Specifications		
Name		Value
Envelope		Metal-ceramic
Spark voltage, kv		2.5
Spark voltage, kv Minimum		2.2
Spark voltage, kv Maximum		2.8
Spark frequency, hz		0.1
Anode current, a		1000 in pulse
Insulation resistance, mohm		1000
Pulse duration, us		17502.5
Pulse duration, us Minimum		5
Pulse duration, us Maximum		35000
Life, pulses		1000

R77

Russian Tube

Uncontrolled

Symmetrical lines protection

Specifications	
Name	Value
Envelope	Metal-ceramic
Spark voltage, kv	0.25
Spark voltage, kv Minimum	0.15
Spark voltage, kv Maximum	0.35
Spark frequency, hz	1
Anode current, a	30000 in pulse
Insulation resistance, mohm	100
Pulse duration, us	15000

R79

Russian Tube

Uncontrolled

Lightning protection

Specifications	
Name	Value
Envelope	Metal-ceramic
Mass	200
Spark voltage, kv	1.1
Spark voltage, kv Minimum	0.9
Spark voltage, kv Maximum	1.2
Anode current, a	200000 in pulse
Insulation resistance, mohm	100
Pulse duration, us	30

R8

Russian Tube

Uncontrolled

Overvoltage protection

Specifications		
Name		Value
Envelope		Glass
Mass		8
Spark voltage, kv		0.5
Spark voltage, kv Minimum		0.45
Spark voltage, kv Maximum		0.55
Spark frequency, hz		1.8
Spark frequency, hz Minimum		1.5
Spark frequency, hz Maximum		2
Insulation resistance, mohm		20
Life, pulses		30000

R80

Russian Tube

Uncontrolled

Lightning protection

Specifications	
Name	Value
Envelope	Metal-ceramic
Mass	200
Spark voltage, kv	1.6
Spark voltage, kv Minimum	1.4
Spark voltage, kv Maximum	1.7
Anode current, a	200000 in pulse
Insulation resistance, mohm	100
Pulse duration, us	30

R81

Russian Tube

Uncontrolled

Communication lines and equipment protection

Specifications	
Name	Value
Envelope	Metal-ceramic
Mass	3
Spark voltage, kv	0.265
Spark voltage, kv Minimum	0.23
Spark voltage, kv Maximum	0.3
Anode current, a	5000 in pulse
Insulation resistance, mohm	1000
Pulse duration, us	20
Life, pulses	20

R85

Russian Tube

Uncontrolled

Application in x-ray equipment

Specifications		
Name		Value
Envelope		Metal-ceramic
Mass		115
Spark voltage, kv		10
Spark voltage, kv Minimum		9
Spark voltage, kv Maximum		11
Spark frequency, hz		5
Commutated power, kw		0.062
Anode current, a		2500 in pulse
Insulation resistance, mohm		500
Life, pulses		1*10e6

R9

Russian Tube

Uncontrolled

Overvoltage protection

Specifications		
Name		Value
Envelope		Glass
Mass		8
Spark voltage, kv		1
Spark voltage, kv Minimum		0.9
Spark voltage, kv Maximum		1.1
Spark frequency, hz		1.8
Spark frequency, hz Minimum		1.5
Spark frequency, hz Maximum		2
Insulation resistance, mohm		20
Life, pulses		30000

RB2

Russian Tube

Uncontrolled

High frequency circuit commutation in radars

Specifications	
Name	Value
Envelope	Glass
Mass	20
Spark voltage, kv	0.22
Insulation resistance, mohm	100

RB3

Russian Tube

Uncontrolled

Application in direct current circuits

Specifications		
Name		Value
Envelope		Metal
Mass		14
Spark voltage, kv		0.243
Spark voltage, kv Minimum		0.22
Spark voltage, kv Maximum		0.265
Spark frequency, hz		2
Discharged capacitance, uf		0.5
Life, pulses		72*10e4

RB5

Russian Tube

Uncontrolled

Communication lines and equipment protection

Specifications	
Name	Value
Envelope	Glass
Mass	12
Spark voltage, kv	0.4
Spark voltage, kv Minimum	0.34
Spark voltage, kv Maximum	0.46
Spark frequency, hz	1
Commutated energy, j	10
Insulation resistance, mohm	200

RO69

Russian Tube

Peaking

Formation of high voltage nanosecond pulses

Specifications		
Name		Value
Envelope		Metal-ceramic
Mass		1900
Spark voltage, kv		400
Spark voltage, kv Minimum		350
Spark voltage, kv Maximum		450
Spark frequency, hz		12.5
Commutated energy, j		10
Commutated energy, j Minimum		8
Commutated energy, j Maximum		12
Life, pulses		100000

RO70

Russian Tube

Peaking

Formation of high voltage nanosecond pulses

Specifications		
Name		Value
Envelope		Metal-ceramic
Mass		1900
Spark voltage, kv		495
Spark voltage, kv Minimum		450
Spark voltage, kv Maximum		540
Spark frequency, hz		12.5
Commutated energy, j		10
Commutated energy, j Minimum		8
Commutated energy, j Maximum		12
Life, pulses		100000

RR1

Russian Tube

Resonant

Receiver input protection

Specifications		
Name		Value
Envelope		Metal-glass
Mass		350g
Frequency range		3244 MHz
Frequency range Minimum		3179 MHz
Frequency range Maximum		3309 MHz
Pulse power		1000kW
Full power		600W
Pulse repeating frequency		675 Hz
Pulse repeating frequency Minimum		350 Hz
Pulse repeating frequency Maximum		1000 Hz
External loading agreement coefficient		1.2
Relax time		30uS
Pulse duration		0.75 uS
Pulse duration Minimum		0.5 uS
Pulse duration Maximum		1 uS

RR140

Russian Tube

Wide-band

Mixing detector protection

Specifications		
Name		Value
Mass		150g
Frequency range		2.9 cm
Frequency range Minimum		2.81 cm
Frequency range Maximum		2.96 cm
Pulse power		300W
Full power		50mW
Pulse repeating frequency		1000Hz
External loading agreement coefficient		1.5
Relax time		8uS
Pulse duration		1uS

RR141

Russian Tube

Insertable

Preprotection in antenna switch

Specifications		
Name		Value
Envelope		Glass
Mass		95g
Frequency range		912MHz
Pulse power		8.5 kW
Pulse power Minimum		7 kW
Pulse power Maximum		10 kW
Full power		2kW
External loading agreement coefficient		1.15
Relax time		250uS

RR142

Russian Tube

Insertable

Application in antenna switch

Specifications		
Name		Value
Envelope		Metal-glass
Mass		400g
Frequency range		1912MHz
Pulse power		7kW
External loading agreement coefficient		1.15
Pulse duration		3uS

RR143

Russian Tube

Insertable

Application in antenna switch

Specifications	
Name	Value
Envelope	Glass
Mass	400g
Frequency range	1912MHz
Pulse power	100mW
External loading agreement coefficient	1.15
Relax time	70uS
Pulse duration	400uS

RR151

Russian Tube

Wide-band

Detector protection

Specifications		
Name		Value
Envelope		Metal
Mass		55g
Frequency range		0.815 cm
Frequency range Minimum		0.803 cm
Frequency range Maximum		0.827 cm
Pulse power		25 kW
Pulse power Minimum		20 kW
Pulse power Maximum		30 kW
Full power		30mW
Pulse repeating frequency		5000Hz
External loading agreement coefficient		1.3
Relax time		5.5uS
Pulse duration		0.1uS

RR2

Russian Tube

Resonant

Receiver input protection

Specifications	
Name	Value
Envelope	Metal-glass
Mass	350g
Frequency range	2999 MHz
Frequency range Minimum	2939 MHz
Frequency range Maximum	3059 MHz
Pulse power	1000kW
Full power	600W
Pulse repeating frequency	675 Hz
Pulse repeating frequency Minimum	350 Hz
Pulse repeating frequency Maximum	1000 Hz
External loading agreement coefficient	1.2
Relax time	30uS
Pulse duration	0.75 uS
Pulse duration Minimum	0.5 uS
Pulse duration Maximum	1 uS

RR20

Russian Tube

Resonant

Receiver input protection

Specifications		
Name		Value
Envelope		Metal-glass
Mass		350g
Frequency range		3109 MHz
Frequency range Minimum		3056 MHz
Frequency range Maximum		3162 MHz
Pulse power		1000kW
Full power		600W
Pulse repeating frequency		675 Hz
Pulse repeating frequency Minimum		350 Hz
Pulse repeating frequency Maximum		1000 Hz
External loading agreement coefficient		1.2
Relax time		30uS
Pulse duration		0.75 uS
Pulse duration Minimum		0.5 uS
Pulse duration Maximum		1 uS

RR200

Russian Tube

Hi-q resonant

Radar receiver protection from hi-power pulses

Specifications	
Name	Value
Envelope	Glass
Mass	6g
Frequency range	3.2 cm
Frequency range Minimum	3.17 cm
Frequency range Maximum	3.23 cm
Pulse power	50kW
Full power	60mW
Average power	50W
Pulse repeating frequency	1000Hz
Relax time	8uS
Pulse duration	0.65 uS
Pulse duration Minimum	0.3 uS
Pulse duration Maximum	1 uS

RR23

Russian Tube

Wide-band

Transmitter block in special equipment

Specifications		
Name		Value
Envelope		Metal
Mass		60g
Frequency range		0.815 cm
Frequency range Minimum		0.803 cm
Frequency range Maximum		0.827 cm
Pulse power		25 kW
Pulse power Minimum		20 kW
Pulse power Maximum		30 kW
Pulse repeating frequency		2000
External loading agreement coefficient		1.2
Relax time		5uS
Pulse duration		0.5uS

RR3

Russian Tube

Resonant

Receiver input protection

Specifications		
Name		Value
Envelope		Metal-glass
Mass		350g
Frequency range		2829 MHz
Frequency range Minimum		2773 MHz
Frequency range Maximum		2885 MHz
Pulse power		1000kW
Full power		600W
Pulse repeating frequency		675 Hz
Pulse repeating frequency Minimum		350 Hz
Pulse repeating frequency Maximum		1000 Hz
External loading agreement coefficient		1.2
Relax time		30uS
Pulse duration		0.75 uS
Pulse duration Minimum		0.5 uS
Pulse duration Maximum		1 uS

RR4

Russian Tube

Resonant

Receiver input protection

Specifications		
Name		Value
Envelope		Metal-glass
Mass		350g
Frequency range		2726.5 MHz
Frequency range Minimum		2672 MHz
Frequency range Maximum		2781 MHz
Pulse power		1000kW
Full power		600W
Pulse repeating frequency		675 Hz
Pulse repeating frequency Minimum		350 Hz
Pulse repeating frequency Maximum		1000 Hz
External loading agreement coefficient		1.2
Relax time		30uS
Pulse duration		0.75 uS
Pulse duration Minimum		0.5 uS
Pulse duration Maximum		1 uS

RR49M

Russian Tube

Hi-q resonant

Mixing detector protection

Specifications		
Name		Value
Envelope		Metal
Mass		135
Frequency range		3.3 cm
Frequency range Minimum		3.1 cm
Frequency range Maximum		3.5 cm
Pulse power		300kW
Full power		25mW
Pulse repeating frequency		1000
Pulse duration		1.2
Pulse duration Minimum		0.35
Pulse duration Maximum		2

RR5

Russian Tube

Hi-q resonant

Radar receiver protection from hi-power pulses

Specifications	
Name	Value
Envelope	Glass
Mass	25g
Frequency range	3003 MHz
Frequency range Minimum	2913 MHz
Frequency range Maximum	3093 MHz
Pulse power	250kW
Full power	55mW
Relax time	10uS
Pulse duration	1uS

RR51

Russian Tube

Hi-q resonant

Application in radars

Specifications	
Name	Value
Envelope	Glass
Mass	60g
Frequency range	10.2 cm
Frequency range Minimum	9.2 cm
Frequency range Maximum	11.1 cm
Pulse power	2MW
Average power	2.5kW
Pulse repeating frequency	2500Hz
Relax time	30uS
Pulse duration	0.5uS

RR6

Russian Tube

Hi-q resonant

Transmitter block in special equipment

Specifications	
Name	Value
Envelope	Glass
Mass	5g
Frequency range	3.2 cm
Frequency range Minimum	3.17 cm
Frequency range Maximum	3.23 cm
Pulse power	100kW
Average power	100W
Pulse repeating frequency	1000
Relax time	8uS
Pulse duration	0.65 uS
Pulse duration Minimum	0.3 uS
Pulse duration Maximum	1 uS

RR81

Russian Tube

Wide-band

Application in antenna switch to protect receiver from transmitter pulses

Specifications		
Name		Value
Envelope		Metal
Mass		1.1kg
Frequency range		570 MHz
Frequency range Minimum		553 MHz
Frequency range Maximum		587 MHz
Pulse power		250kW
Full power		850W
Pulse repeating frequency		375Hz
External loading agreement coefficient		1.4
Relax time		40uS
Pulse duration		3uS

RR82

Russian Tube

Wide-band

Application in antenna switch to protect receiver from transmitter pulses

Specifications		
Name		Value
Envelope		Metal-glass
Mass		0.7kg
Frequency range		570MHz
Pulse power		250kW
Pulse repeating frequency		375Hz
External loading agreement coefficient		1.5
Relax time		40uS
Pulse duration		3uS

RR83A

Russian Tube

Wide-band

Mixing detector protection

Specifications		
Name		Value
Envelope		Metal
Mass		150g
Frequency range		3.3 cm
Frequency range Minimum		3.1 cm
Frequency range Maximum		3.5 cm
Pulse power		12kW
Average power		40W
Pulse repeating frequency		3330Hz
External loading agreement coefficient		1.8
Relax time		2uS
Pulse duration		1uS

RR83A1

Russian Tube

Wide-band

Mixing detector protection

Specifications		
Name		Value
Envelope		Metal
Mass		150g
Frequency range		3.3 cm
Frequency range Minimum		3.1 cm
Frequency range Maximum		3.5 cm
Pulse power		12kW
Average power		40W
Pulse repeating frequency		3330Hz
External loading agreement coefficient		1.8
Relax time		2uS
Pulse duration		1uS

RT39

Russian Tube

Controlled

Switching and overvoltage protection

Specifications	
Name	Value
Envelope	Metal-ceramic
Spark voltage, kv	60
Spark voltage, kv Minimum	45
Spark voltage, kv Maximum	75
Spark frequency, hz	2 per minute
Commutated energy, j	300
Anode current, a	18000 in pulse
Life, pulses	6.5*10e3

RT53

Russian Tube

Controlled

Pulse light sources ignition

Specifications	
Name	Value
Envelope	Ceramic
Mass	40
Spark voltage, kv	1.1
Spark voltage, kv Minimum	0.6
Spark voltage, kv Maximum	1.6
Spark frequency, hz	10.3
Commutated energy, j	1.7
Anode current, a	900 in pulse
Anode current, a Minimum	500 in pulse
Anode current, a Maximum	1300 in pulse
Life, pulses	5*10e5

RT57

Russian Tube

Controlled

Power equipment emergency protection

Specifications	
Name	Value
Envelope	Metal-glass
Mass	8000
Spark voltage, kv	15.9
Spark voltage, kv Minimum	1.8
Spark voltage, kv Maximum	30
Spark frequency, hz	2
Anode current, a	25000 in pulse
Pulse duration, us	500
Life, pulses	50000

RU62

Russian Tube

Controlled

Pulse commutation in small-sized x-ray equipment

Specifications	
Name	Value
Envelope	Metal-ceramic
Mass	60
Spark frequency, hz	25.5
Spark frequency, hz Minimum	1
Spark frequency, hz Maximum	50
Commutated energy, j	91.5
Commutated energy, j Minimum	23
Commutated energy, j Maximum	160
Anode current, a	10000 in pulse
Anode current, a Minimum	4000 in pulse
Anode current, a Maximum	16000 in pulse

RU65

Russian Tube

Controlled

Equipment protection and circuits commutation

Specifications	
Name	Value
Envelope	Metal-ceramic
Mass	800
Spark voltage, kv	28
Spark voltage, kv Minimum	16
Spark voltage, kv Maximum	40
Spark frequency, hz	3.1
Spark frequency, hz Minimum	0.1
Spark frequency, hz Maximum	6
Commutated energy, j	18512.5
Commutated energy, j Minimum	25
Commutated energy, j Maximum	37000
Anode current, a	35000 in pulse
Life, pulses	1025
Life, pulses Minimum	50
Life, pulses Maximum	2000

RU66

Russian Tube

Controlled

Application as commutator in laser firing systems

Specifications		
Name		Value
Envelope		Metal-glass
Mass		1100
Spark voltage, kv		12.5
Spark voltage, kv Minimum		5
Spark voltage, kv Maximum		20
Spark frequency, hz		13
Spark frequency, hz Minimum		1
Spark frequency, hz Maximum		25
Commutated energy, j		110
Commutated energy, j Minimum		20
Commutated energy, j Maximum		200
Anode current, a		70000 in pulse
Life, pulses		50000

RU67

Russian Tube

Controlled

Pulse lamp flash duration control

Specifications	
Name	Value
Envelope	Glass
Mass	10
Spark voltage, kv	0.275
Spark voltage, kv Minimum	0.15
Spark voltage, kv Maximum	0.4
Spark frequency, hz	6
Commutated energy, j	10
Life, pulses	4000

RU68

Russian Tube

Controlled

Application as commutator in high power electrohydraulic equipment

Specifications	
Name	Value
Envelope	Metal-glass
Mass	3000
Spark voltage, kv	13.8
Spark voltage, kv Minimum	2.5
Spark voltage, kv Maximum	25
Spark frequency, hz	10
Commutated energy, j	4000
Anode current, a	35000 in pulse
Pulse duration, us	25

RU69

Russian Tube

Controlled

Application as pulse generator for high power light sources

Specifications	
Name	Value
Envelope	Metal-glass
Mass	50
Spark voltage, kv	3
Spark voltage, kv Minimum	2
Spark voltage, kv Maximum	4
Spark frequency, hz	5
Spark frequency, hz Minimum	0.05
Spark frequency, hz Maximum	10
Commutated energy, j	127
Commutated energy, j Minimum	4
Commutated energy, j Maximum	250
Anode current, a	10000 in pulse
Anode current, a Minimum	4000 in pulse
Anode current, a Maximum	16000 in pulse