

# Technical data

The values specified apply for self-excited operation. The drive power  $P_1$  has already been deducted from the tube output power;  $P_2$  is thus the power available at the output of the oscillator, but excluding circuit-dependent losses.

The table lists the maximum ratings and operating data. The specified limiting frequency is in this table the absolute maximum operating frequency. If a tube is to be operated at an even higher frequency, other maximum ratings must be reduced. Detailed information is available on request.

		RS 3005 CL/CJ	RS 3010 CL/CJ	RS 3025 CL/CJ	RS 3040 CL/CJ	RS 3050 CL/CJ	RS 3150 CJ	RS 3300 CJ	RS 2041 J	RS 1023 L	RS 3002 CL	
Maximum ratings												
Frequency	$f$	160	150	120	100	100	100	50	30	900	500	MHz
Plate voltage	$U_A$	7.2	7.2	12	14	14	14	15	19	1.9	3.5	kV
Grid voltage	$U_G$	-1	-1	-1.5	-1.5	-1.5	-2	-2	-2	-0.3	-0.5	kV
Cathode current	$I_K$	1.4	3.5	6	12	15	30	50	60	0.5	2	A
Peak cathode current	$I_{KM}$	7.5	14	30	50	70	125	250	280	2.2	7	A
Plate power dissipation	$P_A$	2.5	5	15	25	35/40	100	150	240	0.3	3	kW
Grid power dissipation	$P_G$	0.15	0.2	0.45	0.7	1	2	3.5	7	0.013	0.05	kW
Grid resistor tube not conducting	$R_{G, \text{sperr}}$	20	20	15	12	8	5	3	3	20	20	$\Omega$
Operating data												
Frequency	$f$	85	50	40	30	30	30	30	10	433.92	433.92	MHz
Power output	$P_2$	6	12	38	60	110	210	350	550	0.37	1.9	kW
Plate voltage	$U_A$	6.3	7	10	10	12	12.5	14	15	1.7	3	kV
Grid voltage	$U_G$	-550	-600	-800	-900	-800	-700	-600	-740	-100	-230	V
Peak RF grid voltage	$U_{gm}$	950	805	1260	1360	1290	1150	1310	1370	220	370	V
Feedback factor	$K$	16.8	13.1	14	15.3	11.9	10.2	10.4	10.1	17	18.5	%
Plate current	$I_A$	1.27	2.25	4.9	7.8	12	22	32	48.3	0.35	1.15	A
Grid current	$I_G$	0.3	0.47	0.89	1.47	1.95	3.3	6.3	9.1	0.09	0.33	A
Maximum grid current	$I_{G, \text{max}}$	0.35	0.6	1	1.6	2.1	4	7	11	0.11	0.35	A
Maximum grid current in unloaded condition	$I_{G, \text{leer}}$	0.45	0.75	1.4	2.3	3	6	9	14	0.14	0.42	A
Grid resistor	$R_G$	1630	1050	900	610	410	210	127	81	1100	700	$\Omega$
Plate input power	$P_{gA}$	8	18	49	78	144	275	448	725	0.6	3.6	kW
Drive power	$P_1$	0.27	0.36	1.06	1.8	2.4	3.6	7.8	11.7	0.02	0.12	kW
Plate power dissipation	$P_A$	1.75	3.4	10	16	32	61	90	163	0.21	1.45	kW
Grid power dissipation	$P_G$	0.1	0.13	0.36	0.67	0.83	1.8	2.8	4.9	0.01	0.04	kW
Oscillator efficiency	$\eta_{\text{osc}}$	75	76	77.5	77	76	76	78	76	62	55	%
Plate load resistance	$R_A$	2660	1650	1070	660	530	305	230	169	2300	1050	$\Omega$
Heater voltage	$U_F$	6.3	6.3	7	8	10	15	18	20	3.4	3.2	V
Heater current	$I_F$	33	66	115	185	190	255	425	330	18.5	85	A