4 GaAs FETs

■GaAs FET SERIES FOR MICROWAVE-BAND LOW-NOISE AMPLIFIERS

〈T_a=25°C〉

Type No.	Max. ratings				Min. noise index Noise min. power gain				
	V_{GDO} (V)	V_{GSO} (V)	I_D (mA)	P_T (mW)	V_{DS} (V)	I_D (mA)	f (GHz)	NF_{min} max (dB)	G_S min (dB)
MGF1302	−6	−6	100	360	3	10	4	1.4	11
MGF1303B	−6	−6	80	240	3	10	4	1.0	12
							12	2.0	8
MGF1323	−6	−6	80	240	3	10	12	2.3	8
MGF1402B ※	−6	−6	100	360	3	10	12	4.0	5
MGF1412B ※	−6	−6	100	360	3	10	12	3.5	5
MGF1403B ※	−6	−6	80	240	3	10	12	2.3	8
MGF1423B ※	−6	−6	80	240	3	10	12	2.3	8
MGF1425B ※	−6	−6	60	200	3	10	12	1.6	9
MGF1902B	−6	−6	100	360	3	10	12	4.0	5
MGF1903B	−6	−6	80	240	3	10	12	2.0	8
MGF1923	−6	−6	80	240	3	10	12	2.3	8
MGF4314E	−4	−4	60	50	2	10	12	1.0	9.5
MGF4318E	−4	−4	60	50	2	10	12	0.6	9.5
MGF4316G ★★	−4	−4	60	50	2	10	12	0.8	12.0
MGF4319G ★★	−4	−4	60	50	2	10	12	0.5	12.0
MGF4416D ※	−4	−4	60	50	2	10	12	0.8	9.5
MGF4417D ※	−4	−4	60	50	2	10	12	0.7	9.5
MGF4418D ※	−4	−4	60	50	2	10	12	0.6	9.5
MGF4714AP	−4	−4	60	50	2	10	12	1.0	8.0
MGF4714CP ★★	−4	−4	60	50	2	10	12	1.0	11.0
MGF4914E	−4	−4	60	50	2	10	12	1.0	9.5
MGF4918E	−4	−4	60	50	2	10	12	0.6	9.5
MGF4916G ★★	−4	−4	60	50	2	10	12	0.8	12.0
MGF4919G ★★	−4	−4	60	50	2	10	12	0.5	12.0

※ : Communication grade ＊ : Typical value

■GaAs FET SERIES FOR MICROWAVE-BAND MEDIUM AND HIGH POWER AMPLIFIERS

〈T_a=25°C〉

Type No.	Max. ratings				Bias conditions		Frequency	RF characteristic		Package outline	Remarks
	V_{GSO} (V)	V_{GDO} (V)	I_D (A)	P_T (W)	V_{DS} (V)	I_D (mA)	f (GHz)	P_{1dB} min (dBm)	G_{LP} min (dB)		
MGF0904A	−17	−17	0.8	3.75	8	200	1.65	26＊1	15＊2	Flange type hermetic seal	
MGF0905A	−17	−17	3.2	12	8	800	1.65	33＊1	26＊2	Flange type hermetic seal	
MGF0909A ★※	−15	−15	5.0	27.3	10	1.3	2.3	37	10	Flange type hermetic seal	
MGF0910A ★※	−15	−15	5.0	27.3	10	1.3	2.3	37	10	Flange type hermetic seal	
MGF0911A ★※	−15	−15	10	37.5	10	2.6	2.3	40	10	Flange type hermetic seal	
MGF0906B ※	−15	−15	3	23	10	1200	2.3	35.5	10	Flange type hermetic seal	
MGF0907B ※	−15	−15	6	37.5	10	2400	2.3	38.5	8	Flange type hermetic seal	
MGF1601B	−8	−8	0.25	1.2	6	100	8	20.8	6	Microdisk type hermetic seal	
MGF1801B ※	−8	−8	0.25	1.2	6	100	8	21.8	7	Microdisk type hermetic seal	
MGF2407A ※	−15	−15	0.2	1.5	10	75	14.5	23	7	Flange type hermetic seal	
MGF2415A ※	−15	−15	0.4	2.5	10	150	14.5	26	6.5	Flange type hermetic seal	
MGF2430A ※	−15	−15	0.8	5.0	10	300	14.5	29	5.5	Flange type hermetic seal	
MGF2445 ※	−15	−15	1.2	10.0	10	450	12	30.8	4.5	Flange type hermetic seal	
MGFS44V2527 ★★※	−15	−15	24	83.3	10	6400	＊19	43	10	Flange type hermetic seal	internal matching
MGFC45V2527 ★★※	−15	−15	24	83.3	10	6400	＊19	44	11	Flange type hermetic seal	internal matching
MGFC36V3742A ※	−15	−15	3.75	25	10	1200	＊3	35	10	Flange type hermetic seal	internal matching
MGFC38V3642 ★★※	−15	−15	5	30	10	1800	＊20	37	12	Flange type hermetic seal	internal matching
MGFC39V3742A ※	−15	−15	7.5	42.8	10	2400	＊3	38	9	Flange type hermetic seal	internal matching
MGFC40V3742 ※	−15	−15	6	50	10	2400	＊3	39.5	10	Flange type hermetic seal	internal matching
MGFC41V3642 ★★※	−15	−15	12	57.7	10	3400	＊20	40	11	Flange type hermetic seal	internal matching
MGFC42V3742 ※	−15	−15	12	78.9	10	4500	＊3	41.5	9	Flange type hermetic seal	internal matching
MGFC44V3642 ★★※	−15	−15	20	93	10	6400	＊20	43	9	Flange type hermetic seal	internal matching
MGFC36V4450A ※	−15	−15	3.75	25	10	1200	＊4	35	9	Flange type hermetic seal	internal matching
MGFC39V4450A ※	−15	−15	7.5	42.8	10	2400	＊4	38	8	Flange type hermetic seal	internal matching
MGFC40V4450 ※	−15	−15	6.0	50	10	2400	＊4	39.5	9	Flange type hermetic seal	internal matching
MGFC41V4450 ★★※	−15	−15	12	57.7	10	3400	＊4	40	10.5	Flange type hermetic seal	internal matching
MGFC42V4450 ※	−15	−15	12	78.9	10	4500	＊4	41.5	9	Flange type hermetic seal	internal matching

＊1. Pout (dBm). ＊2. Pin (dBm). ＊3. f=3.7~4.2GHz. ＊4. f=4.4~5.0GHz. ＊5. f=5.2~5.8GHz. ＊6. f=5.9~6.4GHz.
＊7. f=6.4~7.2GHz. ＊8. f=7.1~7.7GHz. ＊9. f=7.7~8.5GHz. ＊10. f=9.0~9.5GHz. ＊11. f=9.5~10.0GHz. ＊12. f=10.0~10.5GHz.
＊13. f=10.5~11.0GHz. ＊14. f=11.7~12.2GHz. ＊15. f=12.2~12.8GHz. ＊16. f=12.7~13.2GHz. ＊17. f=14.0~14.5GHz.
＊18. 10.7~11.7GHz. ＊19. 2.5~2.7GHZ. ＊20. 3.6~4.2GHZ.

※ : Communication grade ＊ : Typical value

★ : New product ★★ : Under development