

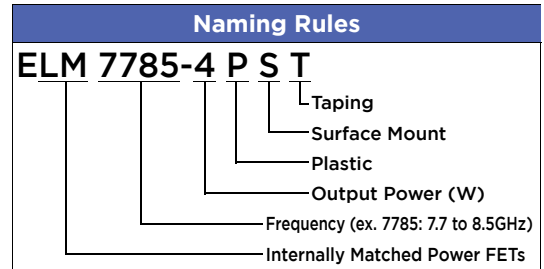
Internally Matched High Power GaAs FETs

FLM/ELM/SLM Series are internally matched power GaAs FETs developed for radio link applications which require high power, high gain, and low distortion in a 50Ω system that are available from 2GHz to 15.3GHz frequency bands.

PS-series are cost effective products of plastic package which can be surface-mounted to save assembly cost. These products can be provided in both taping-reel and Tray.

Features: PS series

- Input/Output Internally Matched
- Plastic Package for SMT Applications (I2C)
- High Gain
- High Output Power
- High PAE
- Frequency Bands (5.9 to 6.4GHz, 6.4 to 7.2GHz, 7.1 to 7.9GHz, 7.7 to 8.5GHz)

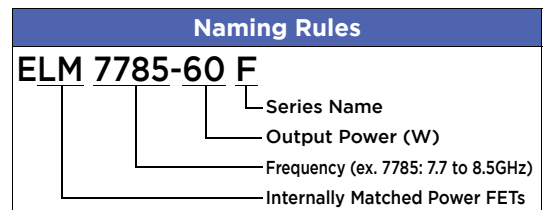


Product Photo

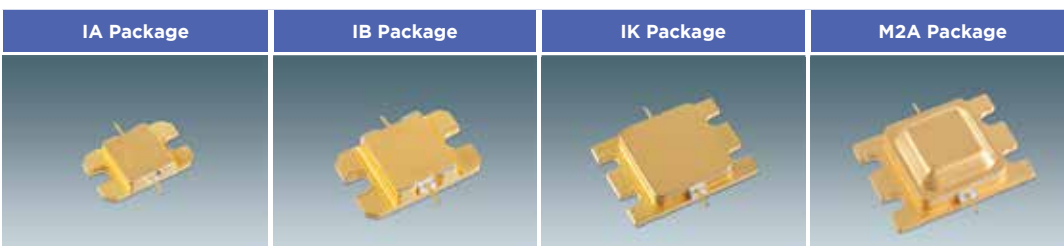


Features

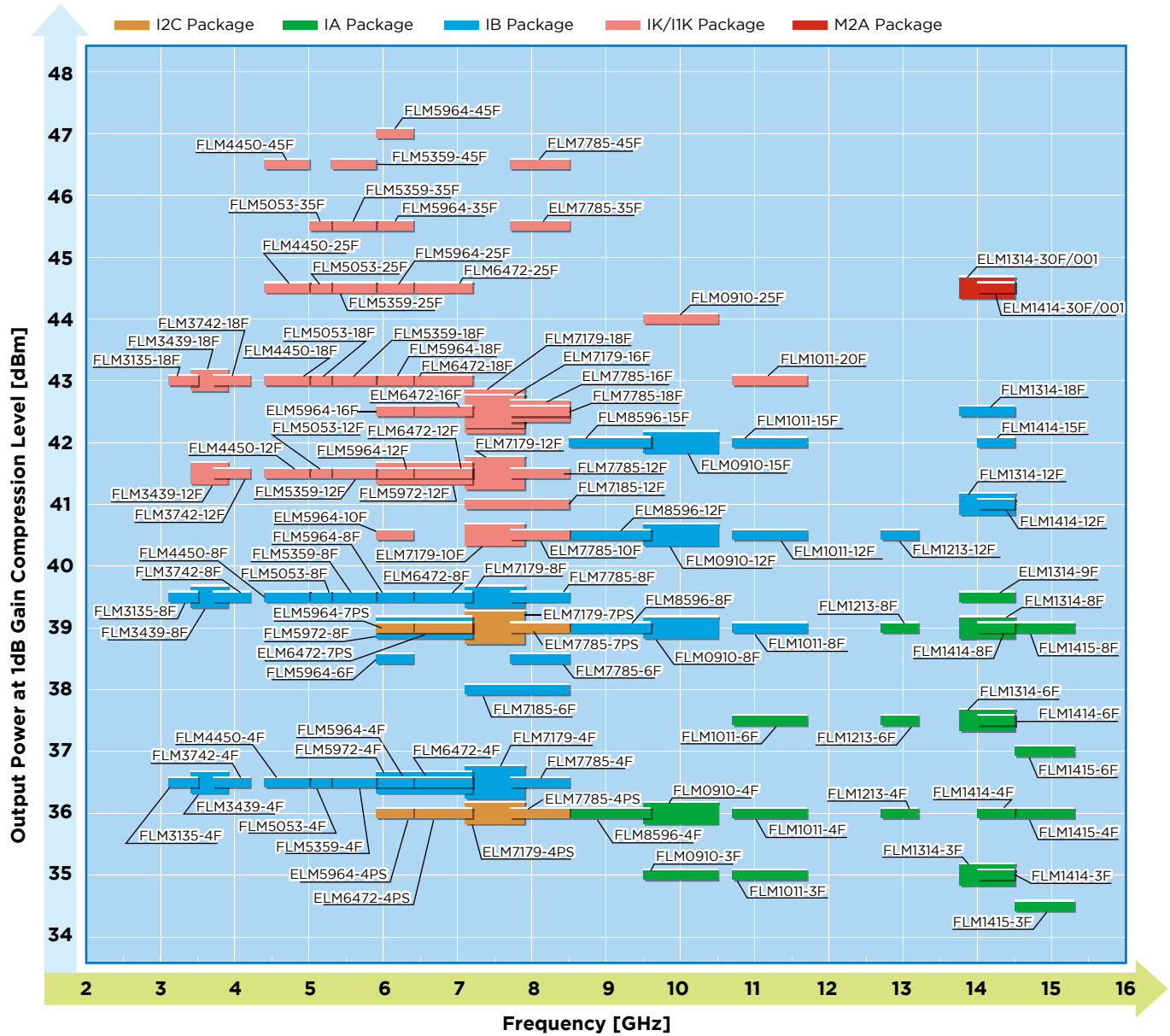
- Input/Output Internally Matched $Z_{in}/Z_{out} = 50\Omega$
- Hermetic Metal Wall Package
- High Gain
- High Output Power (Up to 60W)
- Low Distortion
- Covers Wide Band



Product Photo



Internally Matched High Power GaAs FET Lineup



Specifications (PS series)

Part Number	Freq. (GHz)	IM3 (dBc)	SCL Pout (dBm)	P1dB (dBm)	G1dB (dB)	η_{add} (%)	VDS (V)	IDS (DC) (mA)	IDS(RF) (mA)	Rth (°C/W)	Package	Feature
ELM5964-4PS	5.9-6.4	-43	25.5	36	11.5	37	10	1100	1100	4.5	I2C	<ul style="list-style-type: none"> Internally matched Optimized for each frequency band
ELM5964-7PS	5.9-6.4	-45	28	39	11	36	10	2200	2200	2.5		
ELM6472-4PS	6.4-7.2	-43	25.5	36	11	36	10	1100	1100	4.5		
ELM6472-7PS	6.4-7.2	-43	28	39	10.5	35	10	2200	2200	2.5		
ELM7179-4PS	7.1-7.9	-43	25.5	36	10.5	35	10	1100	1100	4.5		
ELM7179-7PS	7.1-7.9	-43	28	39	10	34	10	2200	2200	2.5		
ELM7785-4PS	7.7-8.5	-43	25.5	36	10	34	10	1100	1100	4.5		
ELM7785-7PS	7.7-8.5	-43	28	39	9.5	33	10	2200	2200	2.5		

Note: Tc(Op)=+25°C

Internally Matched High Power GaAs FETs

Specifications

Part Number	Freq. (GHz)	IM3 (dBc)	SCL Pout (dBm)	P1dB (dBm)	G1dB (dB)	η_{add} (%)	VDS (V)	IDS (DC) (mA)	IDS(RF) (mA)	Rth (°C/W)	Package	Feature
FLM3135-4F	3.1-3.5	-45	25.5	36.5	12	38	10	1100	1100	5	IB	• 50Ω internally matched • No external matching • Optimized for each frequency band
FLM3135-8F	3.1-3.5	-45	28.5	39.5	11	37	10	2200	2200	3		
FLM3135-18F	3.1-3.5	-45	32	43	10.5	37	10	4800	4800	1.6	IK	
FLM3439-4F	3.4-3.9	-46	25.5	36.5	12	38	10	1100	1100	5	IB	
FLM3439-8F	3.4-3.9	-46	28.5	39.5	11	37	10	2200	2200	3		
FLM3439-12F	3.4-3.9	-46	30.5	41.5	11.5	40	10	3250	3250	2.3	IK	
FLM3439-18F	3.4-3.9	-46	32	43	10.5	37	10	4800	4800	1.6		
FLM3742-4F	3.7-4.2	-46	25.5	36.5	12	38	10	1100	1100	5	IB	
FLM3742-8F	3.7-4.2	-46	28.5	39.5	11	37	10	2200	2200	3		
FLM3742-12F	3.7-4.2	-46	30.5	41.5	11.5	40	10	3250	3250	2.3	IK	
FLM3742-18F	3.7-4.2	-46	32	43	10.5	37	10	4800	4800	1.6		
FLM4450-4F	4.4-5.0	-46	25.5	36.5	11	37	10	1100	1100	5	IB	
FLM4450-8F	4.4-5.0	-46	28.5	39.5	10	36	10	2200	2200	3		
FLM4450-12F	4.4-5.0	-46	30.5	41.5	10.5	39	10	3250	3250	2.3	IK	
FLM4450-18F	4.4-5.0	-46	32	43	9.5	36	10	4800	4800	1.6		
FLM4450-25F	4.4-5.0	-46	33.5	44.5	9.5	40	10	6200	6200	1.4		
FLM4450-45F	4.4-5.0	-	-	46.5	10	41	12	7000	8000	1.1		
FLM5053-4F	5.0-5.3	-46	25.5	36.5	10.5	37	10	1100	1100	5	IB	
FLM5053-8F	5.0-5.3	-46	28.5	39.5	9.5	36	10	2200	2200	3		
FLM5053-12F	5.0-5.3	-46	30.5	41.5	9.5	38	10	3250	3250	2.3	IK	
FLM5053-18F	5.0-5.3	-46	32	43	8.5	35	10	4800	4800	1.6		
FLM5053-25F	5.0-5.3	-46	33.5	44.5	8.5	39	10	6200	6200	1.4		
FLM5053-35F	5.0-5.3	-45	34.5	45.5	8	35	10	8000	8000	1.1		
FLM5359-4F	5.3-5.9	-46	25.5	36.5	10.5	37	10	1100	1100	5	IB	
FLM5359-8F	5.3-5.9	-46	28.5	39.5	9.5	36	10	2200	2200	3		
FLM5359-12F	5.3-5.9	-46	30.5	41.5	9.5	38	10	3250	3250	2.3	IK	
FLM5359-18F	5.3-5.9	-46	32	43	8.5	35	10	4800	4800	1.6		
FLM5359-25F	5.3-5.9	-46	33.5	44.5	8.5	39	10	6200	6200	1.4		
FLM5359-35F	5.3-5.9	-	-	45.5	9	35	10	8500	8500	1.1		
FLM5359-45F	5.3-5.9	-	-	46.5	8.5	36	12	8000	8500	0.8		
FLM5964-4F/001	5.85-6.75	-45	25.5	36.5	9.5	36	10	1100	1100	5	IB	
FLM5964-8F/001	5.85-6.75	-45	28.5	39.5	9	35	10	2200	2200	3		
FLM5964-12F/001	5.85-6.75	-45	30.5	41.5	9	37	10	3250	3250	2.3	IK	
FLM5964-18F/001	5.85-6.75	-45	31.5	42.5	9	35	10	4400	4400	1.6		
FLM5964-4F	5.9-6.4	-46	25.5	36.5	10	37	10	1100	1100	5	IB	
FLM5964-6F	5.9-6.4	-46	27.5	38.5	10	37	10	1625	1625	4		
FLM5964-8F	5.9-6.4	-46	28.5	39.5	10	37	10	2200	2200	3	IK	
ELM5964-10F	5.9-6.4	-46	29	40.5	10	39	10	2600	2600	3		
FLM5964-12F	5.9-6.4	-46	30.5	41.5	10	37	10	3250	3250	2.3		
ELM5964-16F	5.9-6.4	-45	31.5	42.5	10	40	10	2800	4000	2.7		
FLM5964-18F	5.9-6.4	-46	32	43	10	37	10	4875	4875	1.6	IK	
FLM5964-25F	5.9-6.4	-46	33.5	44.5	10	37	10	6500	6500	1.4		
FLM5964-35F	5.9-6.4	-40	35	45.5	9	36	10	8000	8500	1.1		
FLM5964-45F	5.9-6.4	-40	35.5	47	8.5	39	10	8000	11000	1.1		
FLM5972-4F	5.9-7.2	-45	25.5	36.5	9.5	36	10	1100	1100	5	IB	
FLM5972-8F	5.9-7.2	-45	28	39	8.5	31	10	2200	2200	3		
FLM5972-12F	5.9-7.2	-45	30.5	41.5	9.5	37	10	3250	3250	2.3	IK	
FLM6472-4F	6.4-7.2	-46	25.5	36.5	9.5	36	10	1100	1100	5	IB	
FLM6472-8F	6.4-7.2	-46	28.5	39.5	9.5	36	10	2200	2200	3		
FLM6472-12F	6.4-7.2	-46	30.5	41.5	9.5	37	10	3250	3250	2.3	IK	
ELM6472-16F	6.4-7.2	-45	31.5	42.5	9.5	40	10	2800	4000	2.7		
FLM6472-18F	6.4-7.2	-46	32	43	9.5	37	10	4875	4875	1.6		
FLM6472-25F	6.4-7.2	-46	33.5	44.5	9.5	38	10	6500	6500	1.4		

Note: Tc (op) = +25°C IM3: 3rd Order Intermodulation Distortion

Specifications

Part Number	Freq. (GHz)	IM3 (dBc)	SCL Pout (dBm)	P1dB (dBm)	G1dB (dB)	η_{add} (%)	VDS (V)	IDS (DC) (mA)	IDS(RF) (mA)	Rth (°C/W)	Package	Feature
FLM7179-4F	7.1-7.9	-46	25.5	36.5	9	35	10	1100	1100	5	IB	<ul style="list-style-type: none"> • 50Ω internally matched • No external matching • Optimized for each frequency band
FLM7179-8F	7.1-7.9	-46	28.5	39.5	9	35	10	2200	2200	3		
ELM7179-10F	7.1-7.9	-46	29	40.5	9	38	10	2600	2600	3	IK	
FLM7179-12F	7.1-7.9	-46	30.5	41.5	9	38	10	3250	3250	2.3		
ELM7179-16F	7.1-7.9	-43	31.5	42.5	8.5	38	10	2800	4000	2.7		
FLM7179-18F	7.1-7.9	-46	32	42.5	8	30	10	4875	4875	1.6		
FLM7185-6F	7.1-8.5	-45	27	38	8	30	10	1625	1625	4	IB	
FLM7185-12F	7.1-8.5	-45	30	41	8	30	10	3500	3500	2.3	IK	
FLM7785-4F	7.7-8.5	-46	25.5	36.5	8.5	35	10	1100	1100	5	IB	
FLM7785-6F	7.7-8.5	-46	27.5	38.5	8.5	31	10	1750	1750	4		
FLM7785-8F	7.7-8.5	-46	28.5	39.5	8.5	34	10	2200	2200	3		
ELM7785-10F	7.7-8.5	-46	29	40.5	8.5	37	10	2600	2600	3	IK	
FLM7785-12F	7.7-8.5	-46	30.5	41.5	8.5	34	10	3500	3500	2.3		
ELM7785-16F	7.7-8.5	-43	31.5	42.5	8	37	10	2800	4000	2.7		
FLM7785-18F	7.7-8.5	-45	31.5	42.5	7	29	10	4700	4700	1.6		
ELM7785-35F	7.7-8.5	-	-	45.5	8.5	35	10	8000	8500	1.1		
FLM7785-45F	7.7-8.5	-	-	46.5	7	32.5	10	8000	11000	1.1		
FLM8596-4F	8.5-9.6	-45	25.5	36	7.5	29	10	1100	1100	5	IA	
FLM8596-8F	8.5-9.6	-45	28.5	39	7.5	29	10	2200	2200	3	IB	
FLM8596-12F	8.5-9.6	-45	29.5	40.5	7.5	25	10	3600	3600	2.3		
FLM8596-15F	8.5-9.6	-	-	42	7.5	32	10	3600	4000	2.3		
FLM0910-3F	9.5-10.5	-46	24	35	7.5	29	10	900	900	5	IA	
FLM0910-4F	9.5-10.5	-46	25.5	36	7.5	29	10	1100	1100	5		
FLM0910-8F	9.5-10.5	-46	28.5	39	7.5	29	10	2200	2200	3		
FLM0910-12F	9.5-10.5	-	-	40.5	7	25	10	3500	3500	2.3	IB	
FLM0910-15F	9.5-10.5	-	-	42	7.5	32	10	3600	4000	2.3	IK	
FLM0910-25F	9.5-10.5	-	-	44	7	30	10	6500	6500	1.4		
FLM1011-3F	10.7-11.7	-46	24	35	7.5	29	10	900	900	5	IA	
FLM1011-4F	10.7-11.7	-46	25.5	36	7	29	10	1100	1100	5		
FLM1011-6F	10.7-11.7	-49	25	37.5	7.5	28	10	1800	1800	4		
FLM1011-8F	10.7-11.7	-46	28.5	39	7	29	10	2200	2200	3	IB	
FLM1011-12F	10.7-11.7	-45	29.5	40.5	6	25	10	3600	3600	2.3		
FLM1011-15F	10.7-11.7	-45	30	42	7	31	10	3600	4000	2.3		
FLM1011-20F	10.7-11.7	-45	31	43	7	27	10	6000	6000	1.4		
FLM1213-4F	12.7-13.2	-46	25.5	36	6.5	28	10	1100	1100	5	IA	
FLM1213-6F	12.7-13.2	-49	25	37.5	7	28	10	1650	1650	4		
FLM1213-8F	12.7-13.2	-46	28.5	39	6.5	28	10	2200	2200	3		
FLM1213-12F	12.7-13.2	-45	28	40.5	5.5	24	10	3300	3300	2.3	IB	
FLM1314-3F	13.75-14.5	-45	24	35	5.5	27	10	900	900	5	IA	
FLM1314-6F	13.75-14.5	-45	26.5	37.5	5.5	22	10	1800	1800	4		
FLM1314-8F	13.75-14.5	-45	28	39	6	27	10	2400	2400	2.8		
ELM1314-9F	13.75-14.5	-30	33	39.5	6	30	10	1750	2400	3.5		
FLM1314-12F	13.75-14.5	-45	29	41	6	23	10	4200	4200	1.8	IB	
FLM1314-18F	13.75-14.5	-30	36	42.5	6	27	10	5000	5000	1.8		
ELM1314-30F/001	13.75-14.5	-30	38	44.5	5.5	22	10	7000	9000	1	M2A	
FLM1414-3F	14.0-14.5	-46	24	35	6.5	27	10	900	900	5	IA	
FLM1414-4F	14.0-14.5	-46	25.5	36	6	27	10	1100	1100	5		
FLM1414-6F	14.0-14.5	-46	26.5	37.5	6.5	24	10	1800	1800	4		
FLM1414-8F	14.0-14.5	-46	28.5	39	6	27	10	2200	2200	3		
FLM1414-12F	14.0-14.5	-	-	41	6	23	10	3600	3600	1.8	IB	
FLM1414-15F	14.0-14.5	-45	30	42	6	26	10	4200	4200	1.8		
ELM1414-30F/001	14.0-14.5	-30	38	44.5	6	22	10	7000	9000	1	M2A	
FLM1415-3F	14.5-15.3	-45	23.5	34.5	5.5	23	10	900	900	5	IA	
FLM1415-4F	14.5-15.3	-	-	36	5.5	26	10	1100	1100	5		
FLM1415-6F	14.5-15.3	-45	26	37	5.5	20	10	1800	1800	4		
FLM1415-8F	14.5-15.3	-	-	39	5	25	10	2200	2200	3		

Note: Tc (op) = +25°C IM3: 3rd Order Intermodulation Distortion