

FEATURES

- High Output Power: P1dB=41.5dBm(Typ.)
- High Gain: G1dB=9.0dB(Typ.)
- High PAE: η_{add} =37%(Typ.)
- Broad Band: 5.85 to 6.75GHz
- Impedance Matched Zin/Zout = 50ohm
- Hermetically Sealed Package

DESCRIPTION

The FLM5964-12F/001 is a power GaAs FET that is internally matched for standard communication bands to provide optimum power and gain in a 50ohm system.

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Unit
Drain-Source Voltage (Tc=25deg.C)	V _{DS}	V
Gate-Source Voltage (Tc=25deg.C)	V _{GS}	V
Total Power Dissipation	P _T	W
Storage Temperature	T _{stg}	deg.C
Channel Temperature	T _{ch}	deg.C

RECOMMENDED OPERATING CONDITION

Item	Symbol	Unit
DC Input Voltage	V _{DS}	V
Forward Gate Current	I _{GF}	mA
Reverse Gate Current	I _{GR}	mA
Storage Temperature	T _{stg}	-55 to +125 deg.C
Channel Temperature	T _{ch}	deg.C

ELECTRICAL CHARACTERISTICS (Case Temperature Tc=25deg.C)

		Min.	Typ.	Max.		
Drain Current	I _{DSS}	-	5	7.5	A	
Trans conductance	g _m	-	5	-	S	
Pinch-off Voltage	V _p	-0.5	-1.5	-3.0	V	
Gate-Source Breakdown Voltage	V _{GSO}	I _{GS} =-250uA	-5.0	-	V	
Output Power at 1dB G.C.P.	P _{1dB}	V _{DS} =10V	40.5	41.5	dBm	
Power Gain at 1dB G.C.P.	G _{1dB}	f= 5.85 to 6.75 GHz	8.0	9.0	dB	
Drain Current	I _{DSR}	I _{DS} =0.65I _{DSS} (typ.)	-	3.25	3.8	A
Power-added Efficiency	η_{add}	Z _s =Z _L =50 ohm	-	37	-	%
Gain Flatness	ΔG		-	-	1.6	dB
3rd Order Intermodulation Distortion	IM ₃	f=6.75 GHz Δf =10MHz	-42	-45	-	dBc
Thermal Resistance	R _{th}	Channel to Case	-	2.3	2.6	deg.C/W
Channel Temperature Rise	ΔT_{ch}	10V x I _{DSR} x R _{th}	-	-	80	deg.C

CASE STYLE : IK

S.C.L. : Single Carrier Level

G.C.P.: Gain Compression Point

ESD

Class 3A 4000V to 8000V

Note : Based on EIAJ ED-4701 C-111A (C=100pF, R=1.5kohm)

RoHS COMPLIANCE

Yes