

< L/S band internally matched power GaAs FET >

MGFS48B2122

2.11 – 2.17 GHz BAND / 60W

DESCRIPTION

The MGFS48B2122 is a 60W push-pull type GaAs power FET especially designed for use in 2.11 – 2.17GHz band amplifiers. The hermetically sealed metal-ceramic package guarantees high reliability.

FEATURES

Push-pull configuration

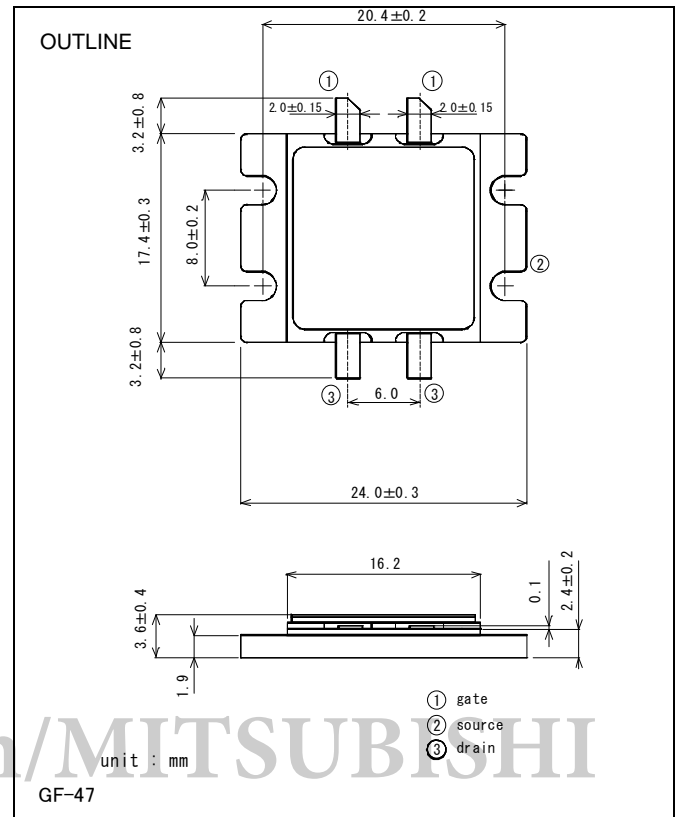
- High output power
Pout=60W (TYP.) @f=2.17GHz
- High power gain
GLP=12.0dB (TYP.) @f=2.17GHz
- High power added efficiency
P.A.E.=48% (TYP.) @f=2.17GHz

APPLICATION

- 2.11-2.17GHz band power amplifier for W-CDMA Base Station

QUALITY

- IG



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RECOMMENDED BIAS CONDITIONS

- VDS=12V • ID=2.0A • RG=25ohm for each gate

Absolute maximum ratings (Ta=25°C)

Symbol	Parameter	Ratings	Unit
VGDO	Gate to drain breakdown voltage	-20	V
VGSO	Gate to source breakdown voltage	-10	V
PT *1	Total power dissipation	125	W
Tch	Channel temperature	175	°C
Tstg	Storage temperature	-65 to +175	°C

*1 : Tc=25°C

Electrical characteristics (Ta=25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
GLP	Linear Power Gain	VDS=12V, ID(RF off)=2.0A, f=2.17GHz Pin=22dBm	11	12	-	dB
Pout	Output Power	VDS=12V, ID(RF off)=2.0A, f=2.17GHz Pin=39dBm	47	48	-	dBm
ID	Drain current	Pin=39dBm	-	11	15	A
P.A.E.	Power added efficiency		-	48	-	%
Rth(ch-c) *2	Thermal resistance	delta Vf method	-	1	1.2	°C/W

*2 : Channel-case

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