MGFS48B2122

2.11 - 2.17 GHz BAND 60W GaAs FET

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=2.17 GHz
- High power gain
  GLP = 12 dB (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

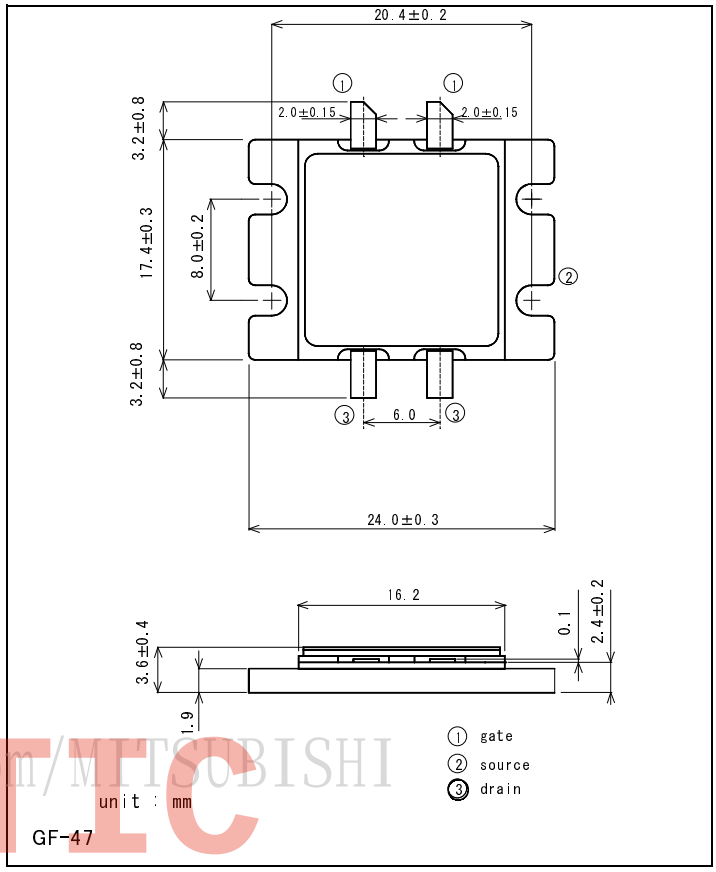
QUALITY GRADE

IG

RECOMMENDED BIAS CONDITIONS

VDS = 12 (V)
ID = 2.0 (A)
RG=20 (ohm) for each gate

OUTLINE



ABSOLUTE MAXIMUM RATINGS (Ta=25deg.C)

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

*1 : Tc=25deg.C

< Keep safety first in your circuit designs! >

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ELECTRICAL CHARACTERISTICS (Ta=25deg.C)

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

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