12G Low Noise FET in Dual mold Plastic PKG

Description :

- Super Low Noise and high Gain
- Original Dual mold Plastic package

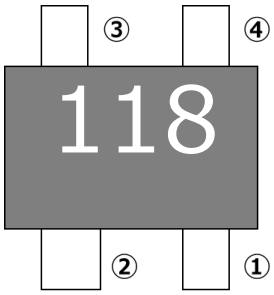
Applications :

- Ku-band LNB (Low Noise Block)

Package :

- Flat-lead 4-pin thin-type super minimold package

PIN Configuration :



PIN No.	PIN Name
1	Source
2	Drain
3	Source
4	Gate

Ordering Information :

Part Number	Order Number	Package	Marking	Supplying Form
CE7613M4	CE7613M4-C2	Flat-lead 4-pin thin-type super minimold package	118	・Embossed 8 mm wide ・Pin 1 (Source), Pin 2 (Drain) Face the perforation side of the Tape ・Qty 15Kpcs/reel

Absolute Maximum Ratings :

Parameter	Symbol	Rating	Unit
Drain to Source Voltage	VDS	4.0	V
Gate to Source Voltage	VGS	-2.4	V
Drain Current	ID	IDSS	mA
Gate Current	IG	80	μA
Total Power Dissipation	Ptot	125	mW
Channel Temperature	Tch	+150	℃
Storage Temperature	Tstg	-55 to +125	℃
Operation temperature	Top	-55 to +125	℃

Recommended Operating Range :

(TA=+25℃, unless otherwise specified)

Parameter	Symbol	MIN.	TYP.	MAX.	Unit
Drain to Source Voltage	VDS	+1	+2	+3	V
Drain Current (ID constant circuit)	ID	5	10	15	mA

Electrical Characteristics :

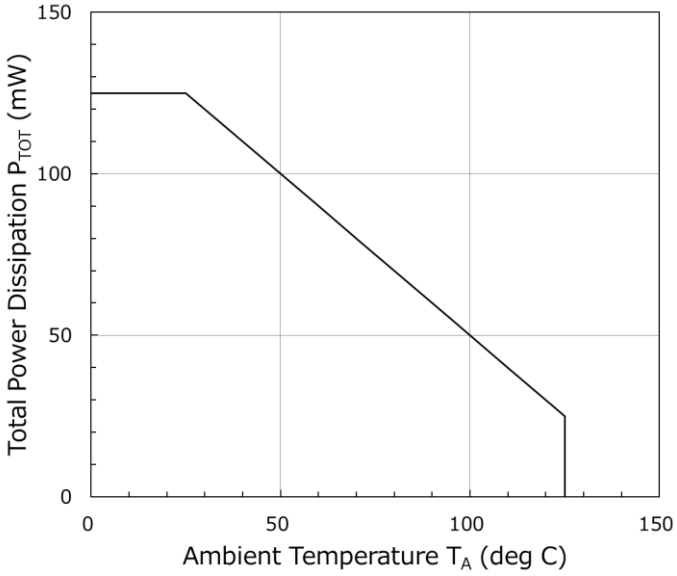
(TA=+25℃, unless otherwise specified)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Gate to Source Leak Current	IGSO	VGS=-3.0V	-	0.30	10.0	μA
Saturated Drain Current	IDSS	VDS=2V, VGS=0V	6.3	20.0	31.9	mA
Gate to Source Cut-off Voltage	VGS(off)	VDS=2V, ID=120μA	-0.67	-0.40	-0.10	V
Trans conductance	Gm	VDS=2V, ID=10mA	51.8	73.4	-	mS
Noise Figure	NF	VDS=2V, ID=10mA, f=12GHz	-	0.35	0.53	dB
Associated Gain	Ga		12.4	14.1	-	dB

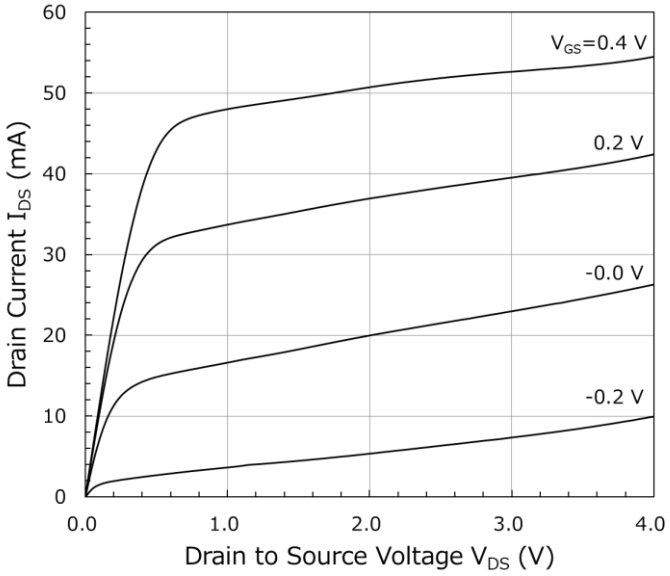
TYPICAL CHARACTERISTICS :

(TA=+25℃, unless otherwise specified)

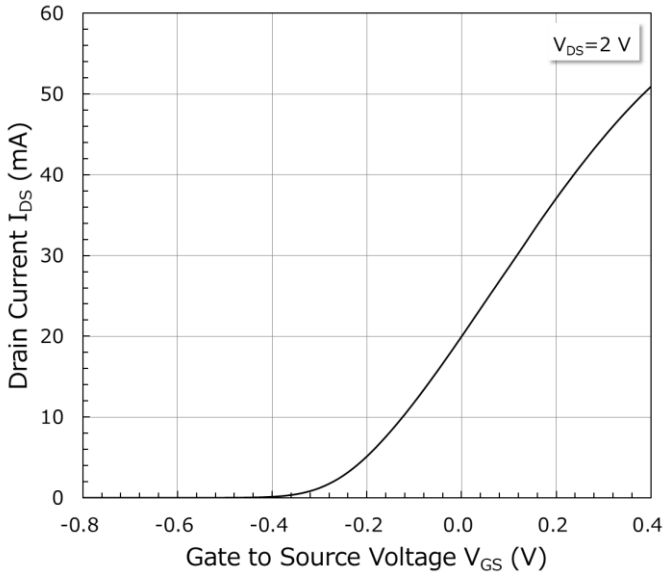
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



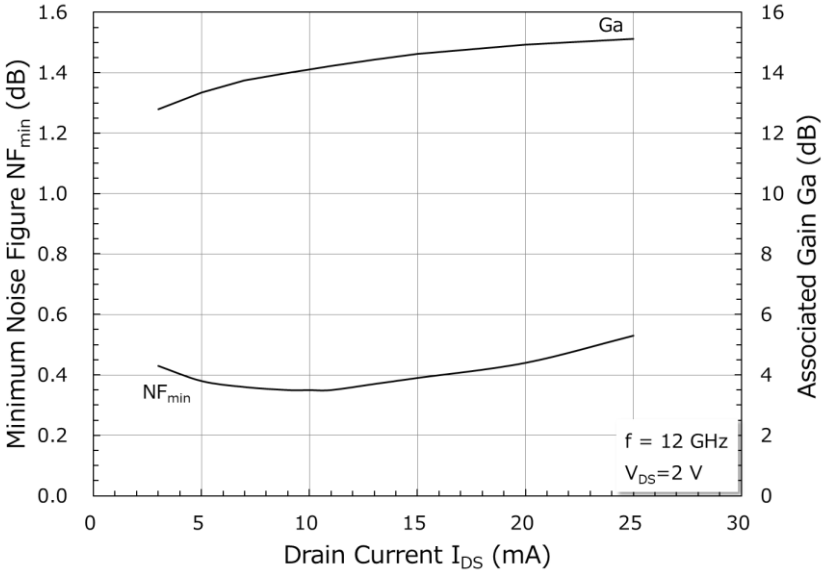
DRAIN CURRENT vs. DRAIN TO SOURCE VOLTAGE



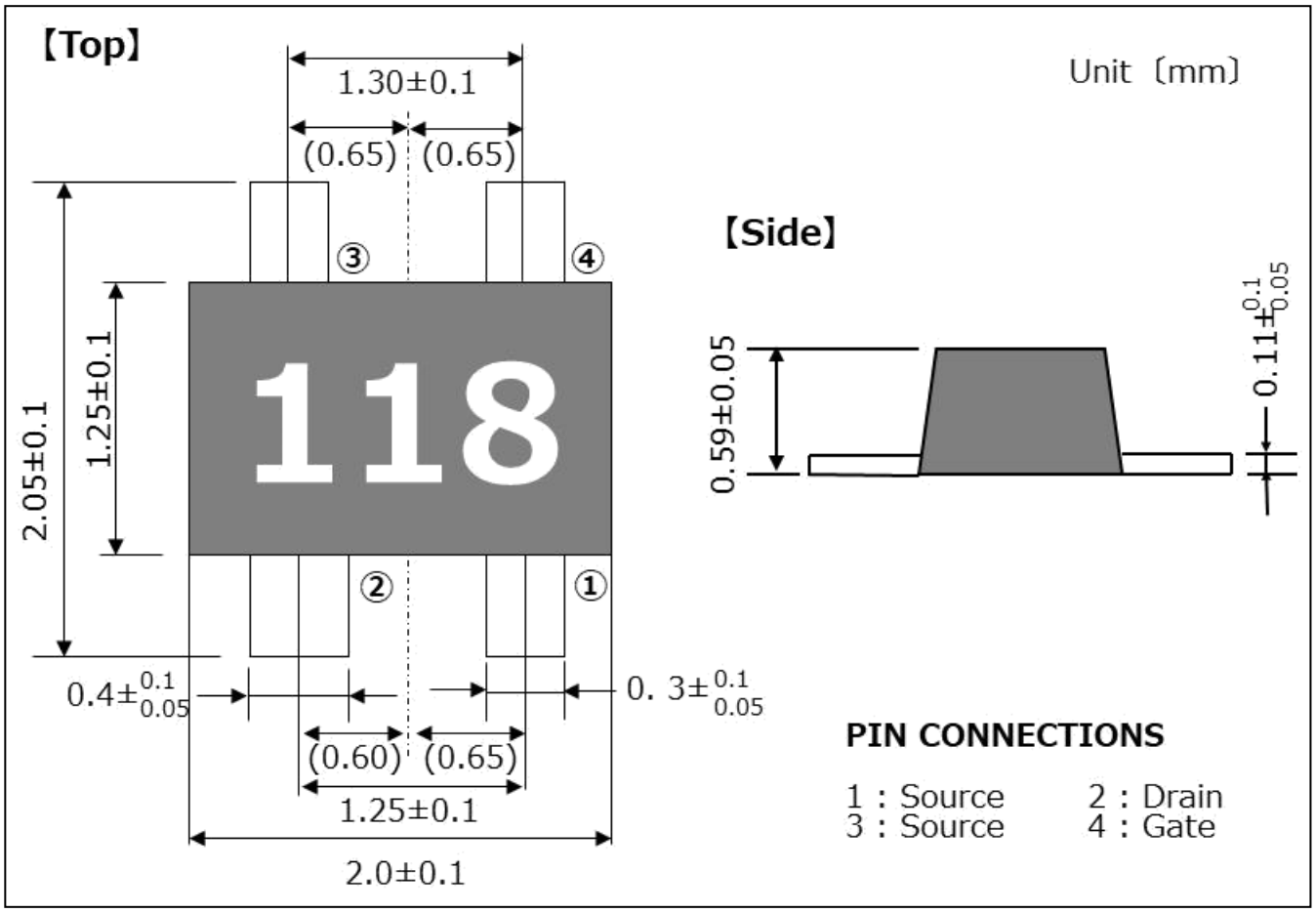
DRAIN CURRENT vs. GATE TO SOURCE VOLTAGE



MINIMUM NOISE FIGURE & ASSOCIATED GAIN vs. DRAIN CURRENT



Package Dimensions :



REVISION HISTORY

Version	Change to current version	Page(s)
CDS-0069-02 November 9, 2020	Initial datasheet	N/A

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