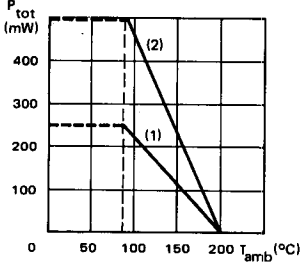


* Preferred device
 Dispositif recommandé

- LF amplification
 Amplification BF
- Differential amplifiers
 Amplificateurs différentiels

$V_{GS1}-V_{GS2}$	{ 10 mV max. 2N 5198 15 mV max. 2N 5199
$\frac{\Delta V_{GS}}{\Delta T}$	{ 20 $\mu\text{V}/^\circ\text{C}$ max 2N 5198 40 $\mu\text{V}/^\circ\text{C}$ max 2N 5199
$\frac{I_{DSS1}}{I_{DSS2}}$	0,9 min.

Maximum power dissipation
 Dissipation de puissance maximale



Case [TO-71] - See outline drawing CB-124 on last pages
 Boîtier Voir dessin coté CB-124 dernières pages



Bottom view
 Vue de dessous



Weight : 0,9 g.
 Masse

ABSOLUTE RATINGS (LIMITING VALUES)
 VALEURS LIMITES ABSOLUES D'UTILISATION

$T_{amb} = +25^\circ\text{C}$

(Unless otherwise stated)
 (Sauf indications contraires)

Drain-source voltage Tension drain-source		V_{DS}	50	V
Gate-source voltage Tension grille-source		V_{GS}	-50	V
Gate-drain voltage Tension grille-drain		V_{GD}	-50	V
Gate current Courant de grille		I_G	50	mA
Power dissipation Dissipation de puissance	1 transistor (1)	P_{tot}	250	mW
	2 transistors (2)		500	mW
	$T_{amb} = 85^\circ\text{C}$			
Storage temperature Température de stockage	min.	T_{stg}	-65	$^\circ\text{C}$
	max.		+200	$^\circ\text{C}$

MATCHING CHARACTERISTICS
CARACTERISTIQUES D'APPARIEMENT
 $T_{amb} = 25^{\circ}C$ (Unless otherwise stated)
(Sauf indications contraires)

	Test conditions <i>Conditions de mesure</i>			Min.	Typ.	Max.	
Zero-gate voltage drain current ratio <i>Rapport des courants de saturation</i>	$V_{DS} = 20V$ $V_{GS} = 0$	$\frac{I_{DSS1}}{I_{DSS2}}$		0,9	0,95	1	
Gate-source differential voltage <i>Tension différentielle grille-source</i>	$V_{DS} = 20V$ $I_D = 200\mu A$	$V_{GS1} - V_{GS2}$	2N 5198 2N 5199		10 15		mV mV
Gate-source differential voltage average temperature coefficient <i>Coefficient de température moyen de la tension différentielle grille-source</i>	$V_{DS} = 20V$ $I_D = 200\mu A$ $-55^{\circ}C \leq T_j \leq +125^{\circ}C$	$\frac{\Delta V_{GS}}{\Delta T}$	2N 5198 2N 5199		20 40		$\mu V/^{\circ}C$ $\mu V/^{\circ}C$
Forward transfer admittance ratio <i>Rapport des admittances de transfert direct</i>	$V_{DS} = 20V$ $V_{GS} = 0$ $f = 1kHz$	$\frac{ Y_{21s} _1}{ Y_{21s} _2}$		0,9	0,95	1	

DYNAMIC CHARACTERISTICS (for small signals)
CARACTERISTIQUES DYNAMIQUES (pour petits signaux)

Total gate leakage current <i>Courant de fuite total de grille</i>	$V_{DS} = 0$ $V_{GS} = -30V$	I_{GSS}			-25		pA
	$V_{DS} = 0$ $V_{GS} = -30V$ $T_{amb} = 150^{\circ}C$	I_{GSS}			-50		nA
Gate-source breakdown voltage <i>Tension de claquage grille-source</i>	$V_{DS} = 0$ $I_G = -1\mu A$	$V_{(BR)GSS}$			-50		V
Drain current <i>Courant de drain</i>	$V_{DS} = 20V$ $V_{GS} = 0$	I_{DSS}^*		0,7	7		mA

* Pulsed
Impulsions $t_p \leq 0,3ms$ $\delta \leq 2\%$

STATIC CHARACTERISTICS
CARACTERISTIQUES STATIQUES
 $T_{amb} = 25^{\circ}C$

 (Unless otherwise stated)
 (Sauf indications contraires)

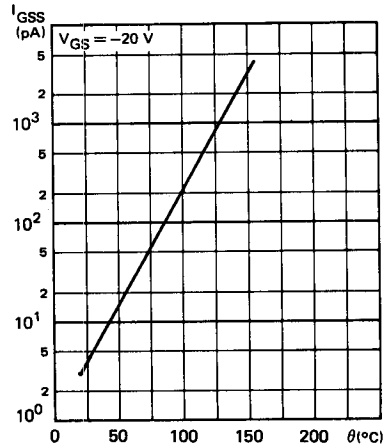
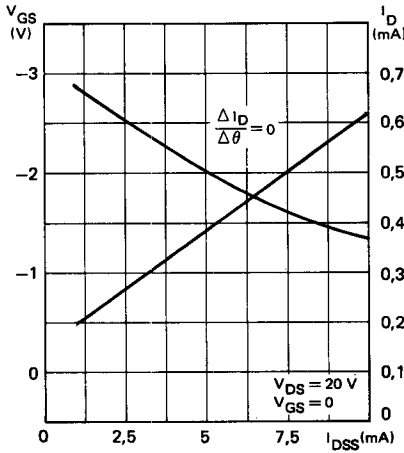
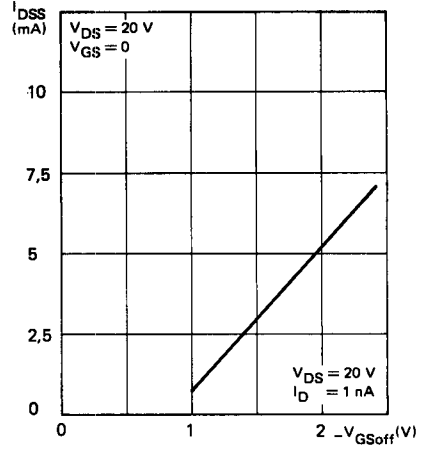
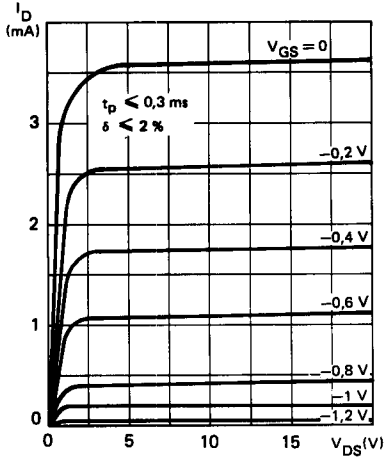
	Test conditions <i>Conditions de mesure</i>			Min.	Typ.	Max.	
Gate-source cut-off voltage <i>Tension grille-source de blocage</i>	$V_{DS} = 20 V$ $I_D = 1 nA$	V_{GSoff}		-0,7	-4		V
Gate-source voltage <i>Tension grille-source</i>	$V_{DS} = 20 V$ $I_D = 200 \mu A$	V_{GS}		-0,2	-3,8		V

DYNAMIC CHARACTERISTICS (for small signals)
CARACTERISTIQUES DYNAMIQUES (pour petits signaux)

Input capacitance <i>Capacité d'entrée</i>	$V_{DS} = 20 V$ $V_{GS} = 0$ $f = 1 MHz$	C_{11ss}			6		pF
Reverse transfer capacitance <i>Capacité de transfert inverse</i>	$V_{DS} = 20 V$ $V_{GS} = 0$ $f = 1 MHz$	C_{12ss}			2		pF
Forward transfer admittance <i>Admittance de transfert direct</i>	$V_{DS} = 20 V$ $V_{GS} = 0$ $f = 1 kHz$	$ Y_{21s} ^*$		1			mS
Output admittance <i>Admittance de sortie</i>	$V_{DS} = 20 V$ $V_{GS} = 0$ $f = 1 kHz$	$ Y_{22s} ^*$			50		μS
Noise figure <i>Facteur de bruit</i>	$V_{DS} = 15 V$ $V_{GS} = 0$ $R_G = 2 M\Omega$ $f = 100 Hz$ $\Delta f = 6 Hz$	F			1		dB

 * Pulsed
Impulsions $t_p \leq 0,3 ms$ $\delta \leq 2\%$

STATIC CHARACTERISTICS
CARACTERISTIQUES STATIQUES



DYNAMIC CHARACTERISTICS
CARACTERISTIQUES DYNAMIQUES

