

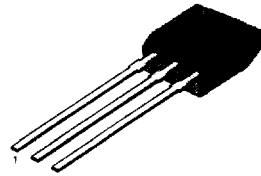
**FM TUNER  
VHF AMPLIFIER**

- NF =2.5dB (TYP)
- $|Y_{FS}| = 9.0 \text{ mS (TYP)}$

**ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ )**

Characteristic	Symbol	Rating	Unit
Gate-Drain Voltage	$V_{GDD}$	-18	V
Gate-Current	$I_G$	10	mA
Power Dissipation	$P_D$	200	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-55 ~ 125	$^\circ\text{C}$

TO-92S



1. Drain 2. Source 2. Gate

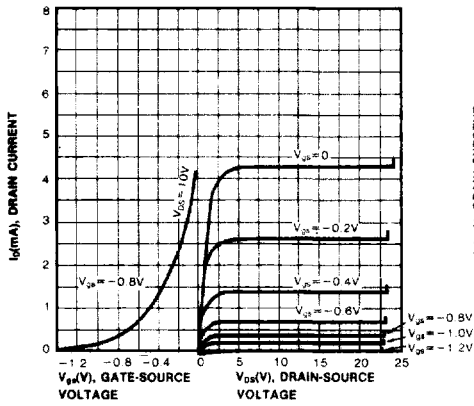
**ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ )**

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Gate Cut-off Current	$I_{GSS}$	$V_{GS} = 0.5\text{V}, V_{DS} = 0$			-10	nA
Gate-Drain Breakdown Voltage	$V(BR)_{GDD}$	$I_G = -100\mu\text{A}$ , Drain	-18			V
Drain Current	$I_{DSS}$	$V_{DS} = 10\text{V}, V_{GS} = 0$	1.0		10	mA
Gate-Source Cut-off Voltage	$V_{GS}(\text{off})$	$V_{DS} = 10\text{V}, I_D = 1\mu\text{A}$	0.4		4.0	V
Forward Transfer Admittance	$ Y_{FS} $	$V_{DS} = 10\text{V}, V_{GS} = 0$ , $f = 1\text{KHz}$		9		mS
Reverse Transfer Capacitance	$C_{rss}$	$V_{DD} = 10\text{V}, f = 1\text{MHz}$			0.15	pF
Power Gain	$C_{PS}$	$V_{DD} = 10\text{V}, f = 100\text{MHz}$		18		dB
Noise Figure	NF	$V_{DD} = 10\text{V}, f = 100\text{MHz}$		2.5	3.5	dB

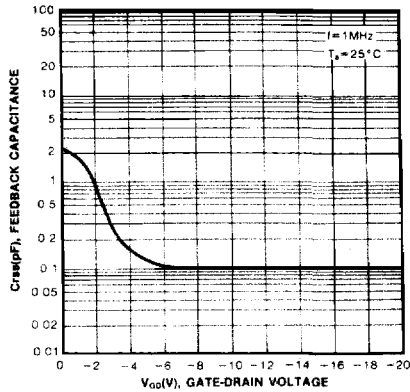
 **$I_{DSS}$  CLASSIFICATION**

Classification	O	Y	G
$I_{DSS}(\text{mA})$	1.0-3.0	2.5-6.0	5.0-10

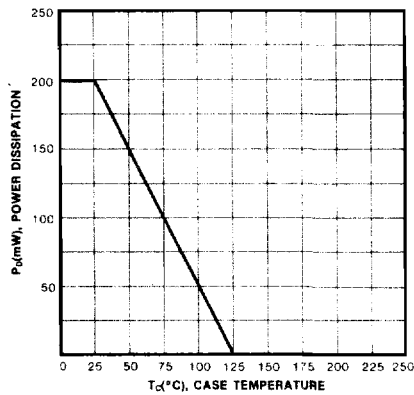
STATIC CHARACTERISTIC



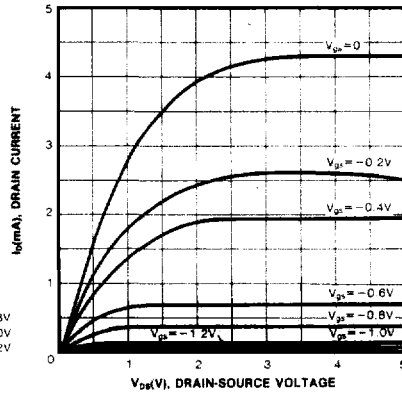
$C_{res} - V_{GD}$



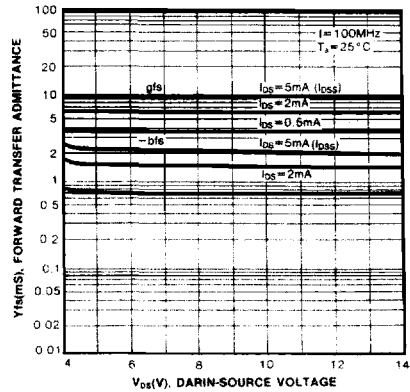
POWER DERATING



$I_D - V_{DS}$



$Y_{fs} - V_{DS}$



$I_D - V_{GS}$

